HUSKY LITTLE BEAR H-64
WELL HISTORY REPORT

NWT- NEW FIELD WILDCAT
TIGHT HOLE

JUNE 2012

ABSTRACT

This end of well report covers drilling operations, evaluation and suspension of the Husky Little Bear H-64 Exploration well drilled in NWT during winter of 2012

Prepared by	Drilling Engineer Sandeep Randhawa Sandeep Rdh June 4, 2012
Reviewed by	Senior Drilling Engineer Goly Zilabi Zilabi June 4, 2012

LIST OF REFERENCES

This document is prepared with reference to the following documents:

- Canada Oil and Gas Drilling and Production Regulations(SOR/2009-315)
- Little Bear Geology report
- Little Bear H-64 well file (Drilling reports)

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A WELL INFORMATION

A.1 WELL SUMMARY

Husky Little Bear H-64 was drilled by Husky Oil Operations Limited in Sahtu region of NWT within Exploration Licence 462 (EL462).

Husky Oil Operations Limited had a 100% working interest in the project.

The program area was located approximately 55 km south-southwest (SSE) of the Town of Norman wells in a low lying area within the Mackenzie River valley. Access to the project crossed EL463, EL462 and a combination of Crown land and First nations land with surface and/or subsurface rights.

Well Little Bear H-64 is located at the surface coordinates of:

Latitude: N64^{o}53'28.5", Longitude: W126^{o}11'20.3" (NAD 27)

Overland travel to the program area utilized the GNWT winter road to an access point approximately 30 km south of Norman wells. From there, new and existing cut lines and an ice bridge across the Mackenzie River was utilized to access the wells site. An airstrip was prepared on a frozen lake adjacent to the Base camp centrally located in the project area. Air strip was used for emergency medical evacuations and as supplement to ground transportation if required. The Little Bear H-64 wellsite was located approximately 47km road distance from the ice bridge crossing of the Mackenzie River and 21km south east from the Base Camp.

Well site & Ice pad was built as per program. 508mm conductor pipe was installed and cemented at 23 m KB. Rat hole rig was used for setting the conductor pipe and cemented using Arctic set cement.

Rig Nabors 23 was moved to the well site from Little Bear N9 location and spudded on 11:30 February 19th, 2012

311mm surface hole was drilled to 510 m KB in Lower Cretaceous with Gel/Polymer mud. 244.5mm casing was run to section TD and cemented with return to surface.

222 mm main hole was drilled to final depth of 1341 m. Coring operations were performed from 1170-1303m. Coring was performed in Canol, Hare Indian, Bluefish to top of Hume formation. Wire line logs were acquired at TD.

177.8mm casing was ran to well TD and cemented with return to surface. A retrievable bridge plug was set at 475 m in 177.8mm casing. Well operations completed at 24:00 March 10th, 2012 and rig was released. Rig was demobilized to Edson, Alberta after finishing Little Bear H-64.

Drilling operations were performed as per Canada Oil and Gas Drilling Regulations (SOR/2009-315) with very good safety performance. Drilling and environmental inspections were performed by the NEB and rated satisfactory.

A.1.1 WELL SUMMARY DATA

Well name	Husky Little Bear H-64
Province /Territories	North West Territories
Operator	Husky Oil Operations Limited
Exploration License	EL-462
Well Classification	New Field Wildcat
Operations Authorization	OA-1204-002
Well ID	2077
UWI	300H64500126000
Proposed Final Depth (MD./TVD)	1412 m KB
Planned Well Profile	Vertical
Actual Well Total Depth	1341 m KB
Actual well profile	Vertical
Surface Coordinates NAD 27, UTM zone 10	Lat. 64°53'28.5"N Long. 126°11'20.3"W
Bottom Hole Coordinates NAD 27, UTM zone 10	Lat 64^{o} 53’ 28.5”N Long. 126^{o}11’19.8”W
Ground Elevation	178.5 m
KB Elevation	183.2 m
Drilling Unit	Nabors 23
Spud date	Feb 19,2012
Rig Release date	March 10, 2012
Planned Days /Actual Days	21 days /20.5 days
AFE amount /Actual	$ 11,500,000 /+/- 9,600,000
Final Well Status	Suspended

A.2 PROJECT SET UP& GENERAL OVERVIEW

A.2.1 SUPERVISION AND PERSONNEL

- Calgary office multi disciplinary project team including a drilling superintendent, a drilling engineer, a geologist, a geophysicist, construction supervisor, procurement advisor and administrator was dedicated to the project from the conceptual design to the end of project execution.
- Onsite supervision was under the direction of a Senior Drilling Supervisor reporting to Husky Oil Operations Limited's head office in Calgary. There was also a Night Drilling Supervisor to allow 24 hour direct supervision of all drilling operations.
- Husky logistics and Surface Development manager based in Norman Wells managed logistics, access road construction, environmental and safety aspects of the project.
- Husky construction& logistics supervisor based in project area, managed access road maintenance, base camps operations, transportations and related services
- There was a full time safety advisor and medic on the site.
- A geologist was onsite from spud to rig Full time drilling fluids engineer was on the site.
- Drilling waste supervision was performed by full time technician on the site.
- Full time mud logging team was on the site
- H_2S service including full time technician was on the site from spud to the end of the well.
- Drilling contractor, Nabors provided a full time rig Manager and onsite Rig crew of minimum 6 kept on the site.
- Specialized services personnel mobilized as required.

A.2.2 SERVICE PROVIDERS

Service	Contact Person	Contact Number
Rig 23 / Nabors	Greg Caouuette	780-916-6868
Drilling Fluid / MI Swaco	Nick Farrell	403-803-0600
Cementing /SLB	Rae Spickett Eugene Harris	403-509-4225 780-512-4435
Bits / Smith	Les Facca	403-585-5232
Coring / Baker	Wayne Gingerysty John Williams	403.850-1767 780.916.0717
Motor / MWD / Phoenix	Jim Anderson	403-512-9678
Mud Logging / Continental	Don MacDonald	403-717-3568
Wire line Logging / Baker	Ramadane Bouchou Dave Ironside	403-462-7606 780-228-4573
Casing / Hallmark	Dirk Blaufuss	403-471-3177
Power tong / Hallmark	Markus Busch	780-720-9092
Casing Acces. / Weatherford	Dwayne DuBourdieu	403-390-7645
Bridge plug / Weatherford	Laren Cruise	403.819.6366
Fishing Tool / Weatherford	Len Armstrong	403-540-0293
Wellhead / Streamflo	Scott Brinson	403-862-3462
Pressure test / Big Eagle	Terry Oakley	780-933-9963
Safety Service / HSE	Ed Rode	4-3-815-5911
Rig Move / Mullen	Bill Cardinal	780-499-9566
ERP	Greg Marshall	403-863-0630

A.2.3 PROJECT MOBILIZATION

Project mobilization was started with barging of construction equipment on September 10th, 2011.Construction of access road was started on Dec 10, ice bridge was finished by January 18th, 2012.

A rat hole rig was mobilized to set the conductor following the opening of the access road from south in 3rd week of January, 2012.

Rig Nabors 23, service equipments and materials mobilization started on January 20th, 2012. There was four day delay due to adverse winter conditions.

Little Bear N-9 was spudded by Nabors 23 rig on January 27th 2012 and rig released on February 16th, 2012. Rig was moved from Little Bear N-9 to Little Bear H-64 and spudded on February 19th, 2012 at 11:30 AM.

A.2.4 ACCESS ROAD

- The Slater River Program area is approximately 55km SSE of Norman Wells. Overland travel to the program area utilized the GNWT winter road to kick-off point approximately 30km southeast of Norman Wells. An ice bridge was constructed across the Mackenzie River. The Little Bear H-64 wellsite is located 47 km from the proposed ice bridge crossing of the Mackenzie River (approximately 21 km from base camp).

A.2.5 WELL SITE

Refer to attachment E_5 Wellsite Survey.

- The size of the well site was 130 m x 130 m. Ice pad (0.5 m thickness) was made at the well site to support the drilling rig.
- A 2.4 m diameter corrugated steel cellar was dug into the ice pad below the natural ground level and grouted in place.
- A synthetic liner was installed on the footprint of the drilling area prior to the installation of rig components, including the substructure and mud tanks, to contain any accidental and operational spills.
- Soil assessment to 1.2 m BGL was performed at this location. Permafrost was not encountered in any part of the location..

A.2.6 DRILLING RIG

Rig Nabors 23 was used to drill this well. A detailed inspection on the rig was performed and some modification implemented before mobilizing the rig to NWT. Rig performed as per well program requirement. Refer to attachment E_4 rig specifications & layout.

A.2.7 CAMP

The drilling crew was accommodated in a camp that was co-located with a construction camp and consist of a 40-person skid camp, associated generators and portable sewage treatment systems. The camp clearing was 220m x 180m in order to meet NEB safety specifications and to meet the size requirements to house personnel from the drilling, access construction and seismic program operations. Co-locating the camps reduced the operational footprint. A central location for crew housing provides a measure of safety in terms of crew travel and results to logistical efficiencies. The campsite was located in 21 km from the H-64 wellsite.

Eight wellsite trailers were temporarily stationed at the wellsite to accommodate personnel that are required on-wellsite during the drilling process.

A.2.8 WATER SUPPLY

Water was required for ice bridge and road construction, drilling operations and road and lease construction and maintenance. The Mackenzie River and seven potential water sources included in license application were used. Water intakes were screened as per the current Department of Fisheries and Oceans Canada (DFO) Protocol The domestic water supply (camp wash water, showers, and toilets) was drawn from the Mackenzie River and treated prior to use.

Drinking water was purchased and transported to the project area.

A.2.9 WASTE DISPOSAL

Waste Management H-64 (Summary)

- Sumpless drilling waste operations were employed for the drilling program. All waste generated as detail below were shipped to waste facilities in Alberta.
- A water-based drilling fluid system was used for drilling the surface hole on the H-64 location. The waste streams generated included used water-based drilling fluids and drill cuttings and fines.
- The intermediate / main hole was drilled with a mineral-oil based drilling fluid system (invert). The waste stream included the rock cuttings and fines contaminated with invert.
- Recovered mineral oil from the H-64 location was returned to the Mud Company's storage facility in Fort Nelson, British Columbia for reconditioning..
- Cement returns were stored within the onsite lined cement rings to harden, prior to being transported by sealed and tarped end-dump trucks to the CCS Class II Oilfield Waste Landfill Facility located in Rainbow Lake, Alberta
- After drilling operations were completed and the rig moved offsite, the lease cleanup process began. All lease cleanup material was loaded into sealed and tarped end dump trucks and hauled to the appropriate facility.
- Drilling waste types, volumes, and final disposal locations are summarized in Table 1.

Table 1: Little Bear H-64 Waste Tracking

Waste Type	Disposal Facility	Volume	Units
Water Based Gel/chem Fluids	Newalta TRD	56	m^3
Water Based Gel/chem Fluids	CCS Rainbow Lake TRD	50	m^3
Water Based Gel/chem Solids	CCS Rainbow Lake Landfill	83.45	tonnes
Invert Solids	CCS Rainbow Lake Landfill	142	tonnes
Cement	CCS Rainbow Lake Landfill	8.22	tonnes
Lease cleanup	CCS Rainbow Lake TRD	43	m^3
Lease cleanup	Newalta TRD	25	m^3
Lease cleanup	CCS Rainbow Lake Landfill	117.03	tonnes

- Domestic waste streams including sewage treatment and effluent discharge, incineration, and other details pertaining to the drilling waste and waste management operations can be viewed in the detailed report located in Attachment E.6.

A.2.10 SAFETY AND INSPECTION

- Husky Slater River project had site specific emergency response plan.
- NEB performed safety and well integrity inspection on Little Bear H-64 camp and well operations on Feb 29th with satisfactory evaluation. Husky implemented corrections recommended by the NEB. Refer to attachment E_7 NEB inspection reports
- Sahtu Land and Water Board performed one inspection on the project with satisfactory result.
- AANDC performed 3 inspections on the project with satisfactory result.
- NEB preformed environmental inspection during drilling Husky Little Bear H-64 on Feb. 28th with satisfactory result.
- Incidents were reported as per regulatory requirement.
- Two spills occurred on Husky Little Bear H-64.
    - Spill: On Feb 20th, while circulating invert oil mud in the tank farm, due to mis-aligned valve, one tank overflowed and resulted to 10 m3 of invert mud overflowed in the tank farm containment berm. No Spill outside of the containment berm and no contact to soil.
    - Spill: On Feb 21 Vac truck driver overfilled evaporator and spilled approx 250 liters of dirty water onto the ground. Approx 100 litters of dirty water and ice was cleaned up.

B WELL RESULT

B.1 WELL RESULT

B.1.1 WELL OBJECTIVE

Well Little Bear H-64 was planned as a validation well to evaluate the Canol, Hare Indian and Bluefish Shales in oil thermal maturity window. Objective was to obtain core and specialty logs from shales in this well, which will help Husky evaluate mineralogy, geomechanical properties, thermal maturity, effective porosity, matrix permeability and saturation of these rocks.

Well H-64 drilled through Slater River, Imperial sands, Canol, Hare Indian, Bluefish and terminated in Hume formation. Total well depth was 1341 m. 122 m of core was cut (114m recovered) in zones of interest and specialty wire line logs were ran. Well was cased and cemented with 177.8 mm casing in main hole and suspended with two barriers in place.

Refer to E 8 well Little Bear N9 planned stick diagram for well objectives and well design.

B.1.2 EVALUATION

Cutting Sample	➢ NEB: 5m intervals surface to TD. 2 vial sets and 1 bag set 500g minimum. ➢ Husky: Samples in vials at 5m intervals surface to TD. ➢ GSC: Bagged samples at 5m intervals from surface to base of Cretaceous.
Mud Log	Continuous gas reading from surface;
GR while drilling	Recorded GR from 124 m in surface hole to Core Point.
Coring	122 m core in Canol, Hare Indian, Bluefish and Hume.
Logs	Induction Resistivity (510 – 1340.2 m) Gamma Ray (0-1340.2 m) Spectral Gamma Ray (510 – 1308.8 m) Density-Photoelectric Effect (510 – 1340.2 m) Neutron (4 -1340.2 m) Sonic (510 – 1340.2 m) Neutron Spectroscopy (650- 1329.1 m) Nuclear Magnetic Resonance (650-1337.4 m) Electric Imaging (565 -1327 m) Acoustic Imaging (787-1337.5 m) Acoustic Cement Bond (15.5 - 538 m)

B.1.3 RESERVOIR FLUIDS, PRESSURE & TEMPERATURE

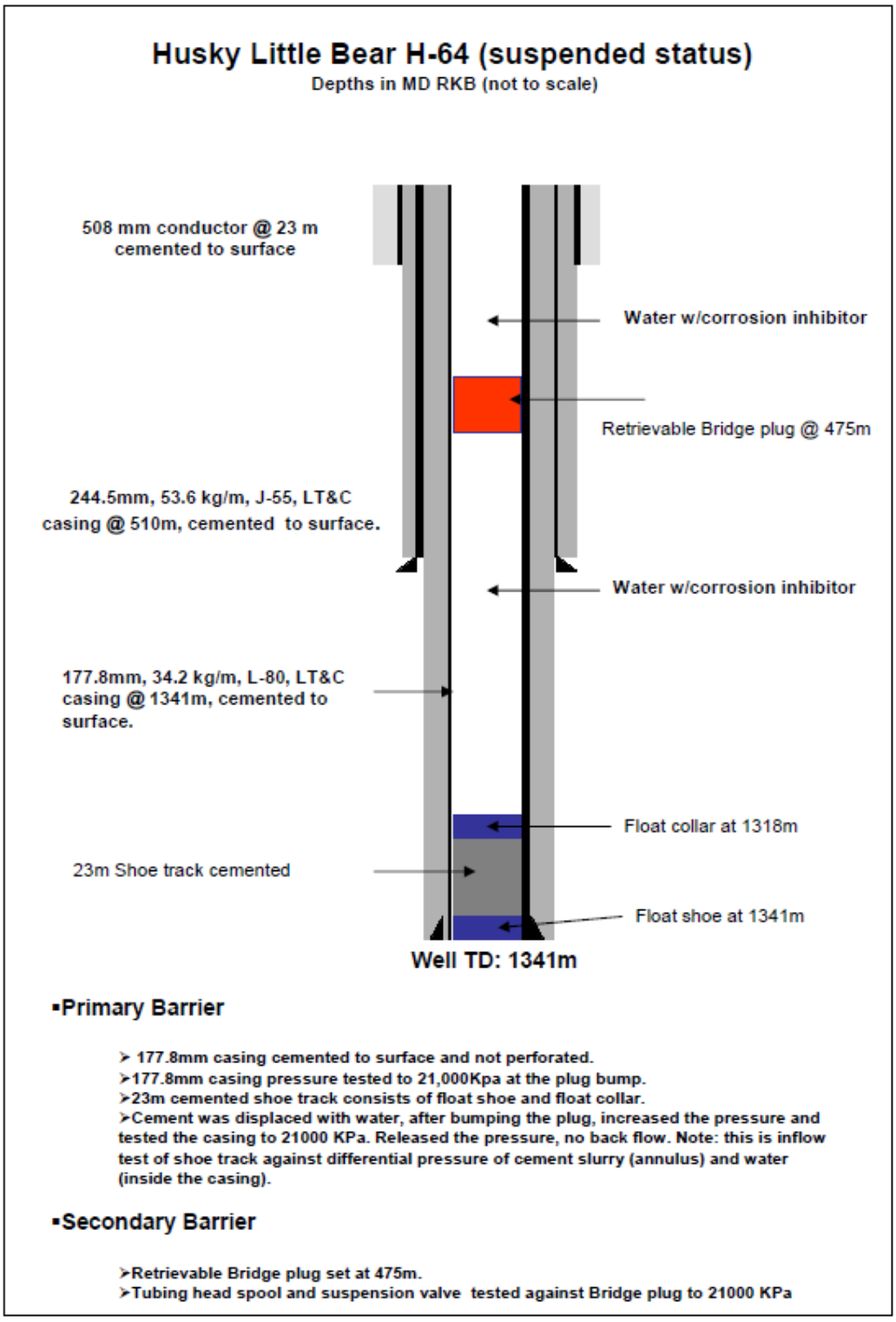
Bottom hole temperature of 53.2 deg.C at well TD was recorded by wireline log.

Surface hole was drilled with water based mud, 1010- 1190 Kg/m^3. There was no evidence of shallow gas in this section.

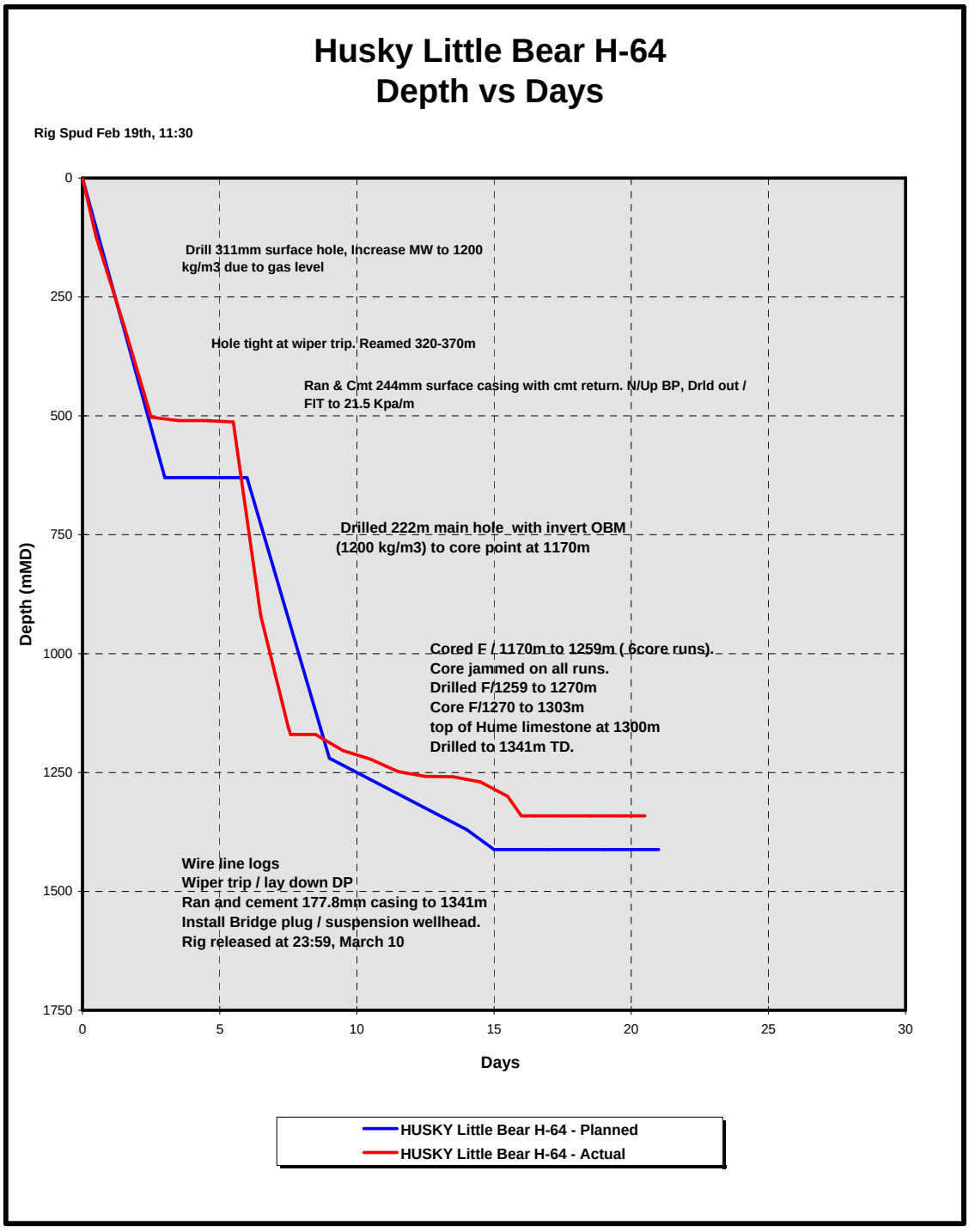
Main hole was drilled from 510 m to 1341m with invert oil mud, 1200-1260 kg/m^3. MW was increased to keep the background gas at manageable level.

B.2 FINAL WELL STATUS

For detail suspension operations refer to section C.4.10 suspended



B.3 TIME VS DEPTH CURVE



C WELL CONSTRUCTION

C.1 WELL SITE

- 130 m X 130 m. ice pad was built at well site to support the drilling rig.
- A 2.4 m (8 ft) diameter corrugated steel cellar dug into the ice pad (70 to 100 cm below ground level) and grouted in place.

C.2 CONDUCTOR PIPE 508 MM

C.2.1 INSTALLATION

- Conductor was set with a rat hole rig provided by Cancor Rathole.
- 762 mm vertical hole drilled to 23 m KB. Ran 508 mm conductor pipe.
- Pressure cemented with 15 m^3 (19 tons) of Arctic set cement with returns to surface.
- Top of the 508 mm conductor pipe was cut above the level of ice pad and 540 mm, 14000 kPa diverter was installed.
- Refer to attachment E_3 well control set up

C.3 SURFACE HOLE 311 MM SECTION (23-510m)

C.3.1 SECTION OVERVIEW

311 mm surface hole was drilled vertically with a Directional Motor BHA to 510 m KB using a Gel/Polymer mud. 244.5 mm surface casing set at 510 m KB and cemented with cement return to surface.

No wireline logs were ran in this section. MWD Gamma was acquired from 124m KB to surface TD. While logging the main hole at well TD, GR/Neutron was extended across surface casing from shoe to surface.

No hydrocarbon bearing zone encountered in this section. Diverter system was installed for drilling this section.

C.3.2 SURFACE SECTION SUMMARY

	Remarks
Well Control	540 mm, 14000 KPa diverter was installed Refer to attachment E_3 well control set up
H2S Service	H_2S service including H_2S detector and air package and full time technician was operational from spud to end of the well due the exploratory nature of the well.
Drilling	Drilled 311 mm section with directional motor to 510 m
Drilling fluid	Water based polymer mud with mud weight range of 1010 to 1190 kg/m^3. Refer to C.3.4 surface hole drilling fluid and attachment E_9 daily drilling fluid reports
Bit& BHA	Refer toC.3.6 Drilling parameters & Bit &BHA (311mm surface hole section) for detailed bit & BHA and drilling parameters.
Formation	Slater River from 122 to 430 m and Lower cretaceous from 430 m to surface TD 510.
Mud Logging	Mud logging service was utilized from surface to well TD.
Hydrocarbon show	Gas reading in mud returns up to 9% in Slater River. No flow.
Hole stability	Required to ream tight hole before running surface casing.
Hole deviation	Max deviation in surface hole section = 2.3 ^{o} at 416 m MD. For detailed directional drilling and well surveys refer to C.3.5 directional survey and attachment E_2 directional survey& plot
Lost of Circulation	None
Casing	244.5 mm casing ran to 510 m and cemented with returns to surface. Refer to C.3.7 and C.3.8 for casing and cement detail

C.3.3 LESSON LEARNED

Operations	Remarks
Deviation Tendency	Surface hole was drilled to 124 m using a slick BHA. Deviation was < 1^o in this interval. BHA with directional motor was used from 124 m to Surface TD. Max deviation was 2.3^o at 416 m. Directional motor is recommended to prevent excessive deviation on surface. See C.3.5 directioanl survey and attachment E_2 directional survey& plot for Directional detail.

C.3.4 DRILLING FLUID

Refer to C.3.4 surface hole drilling fluid and attachment E_10 daily drilling fluid reports for detailed mud properties and chemical consumption.

Spud the 311 mm hole section with Gel & Polymer water based mud at 1010 kg/m^3. Mud weight was increased to 1190 kg/m^3 by TD. Mud weight and solids were controlled using shakers and centrifuges.

The following are the mud parameters:

Mud Parameter	
Mud Type	Gel Polymer
Density (kg/m^3)	1010-1190
Viscosity (sec/liter)	43-51
PV (mPa-sec)	7-23
YP (Pa)	3.5-8.5
Gel Strengths 10sec / 10min	4-4.5/7-9
Fluid loss (cc)	6-15
pH	9

C.3.5 DIRECTIOANL SURVEY

- Drilled to 124 m with slick BHA and survey the well with Totco.
- Drilled From 124 m to 510 m with Directional motor and MWD.
- Entire section was drilled with inclination less than 2.5 deg. Inclination at 510 m was 1.6 degree. Refer to attachment E_2 directional survey& plot for well directional survey.

C.3.6 DRILLING PARAMETERS& BIT &BHA (311MM SURFACE HOLE SECTION)

Bit No/ Run	Size (mm)	Make/ Type	IADC Code	TFA (mm^2) Nozzle (mm)	MD In/ Out (m)	Total Drilled (m)	Drilling Hours	ROP m/hr	WOB KdaN	RPM	Pump output (m^3)	Pump press (KPa)	Mud Wt Kg/m^3	Bit condition	Remark
1	311	Smith XR1CP	117	1335 23.8/23.8/23.8	23/124	101	10.5	9.6	4-5	140	2.3	1100	1010	2-2-WT-A-E-0-NO-BHA	Drilled to 124.Pulled out to pick a PDC bit.
BHA: 311mm Bit+ Bit sub (w/float)+ 2 x 207 mm Monel + X/O +2 x 165 mm DC + Jar + 2 x 165 mm DC + X/O+ HWDP to surface															
2	311	Smith PDC M516	M123	6x 10.3	124/510	386	19.5	19.8	4-5	30	2.5	9500	1190	1-1-CC-H-X-0-CC-CP	Drilled to 510 m, pulled out to run casing.
BHA: 311mm PDC bit+ 203 mm Motor +UBHO+ 2 x 207 mm Monel + X/O+ 1x 165mm DC+ 165 mm jar+ 3x 165 mm DC+X-over+8x 101mm HWDP+ 101mm DP															

C.3.7 SURFACE CASING SPECIFICATION

Interval (m)		Size	Weight	Tubular	Thread	Pipe ID	Drift	Coupling
From	To	(mm)	(kg/m)	Grade	Type	(mm)	(mm)	OD (mm)
0	510	244.5	53.57 kg/m	J-55	LT&C	226.59	222.6	269.87

Casing Performance Properties						
Burst KPa	Collapse KPa	Pipe body yield strength daN	Joint strength daN	Make up Torque N-m		
				Min	Optimum	Max
24,270	13,930	250,000	201,000	4600 N-m 3400 ft-lb	6100 N-m 4500 ft-lb	7700 N-m 5600 ft-lb

C.3.7.1 SURFACE CASING STRING DETAILS

Qt.	Length	Description	Centralization
1	0.44	244.5 mm Float shoe PDC drillable	
1	13.45	244.5mm Csg Joint	C-1 One Bow spring at 3m above the shoe (on stop collar)
1	0.43	244.5 mm Float shoe PDC drillable	C-1 One Bow spring at 3m above the float collar (on stop collar)
37	510m	244.5mm Csg Joint	C-1 One Bow spring on the 3 joint above Float collar C-4 One every 4jts (50m) up to conductor (on the coupling)

C.3.8 SURFACE CASING CEMENT DESIGN

Type	Composition	Density/ thickening time	Volume	Remarks
Pre flush	Water	1000+ Kg/m^3	4 m^3	
Cement	Surface cement RFC 2 % D151 Ca Cl_2 0.2% D 46 De-foamer	1740 Kg/m^3 Thickening time: 4 hrs	40.0 m^3 43 tonnes	Added Cellophane (LCM) while mixing cement.
NOTE: Good returns throughout the job with 20 m^3 cement returns to surface. Floats held. WOC for 6hrs.				

C.3.9 CASING BOWL & BOP

After cementing 244.5mm casing. Waited on cement for 6 hours.

Nippled down diverter, cut the conductor and install the Casing Bowl

Installed Streamflo casing bowl 11" (279.4mm) 3000 psi (21 MPa) x 9 5/8"" (244.5mm) slip-on bowl API DD. c/w two 2-1/16" 3000 psi (21 MPa) SSO and two lockdowns (PSL-2).

Tested casing Bowl weld to casing at 7000 kPa with nitrogen.

Installed 279mm, 21 MPa (11"-3000#) BOP stack (Annular preventer, Blind ram, 101mm pipe ram), Drilling spools, adapter, Kill lines, Choke line, choke manifold,

Pressure test BOP, and related lines and equipment with 1400 kPa low and 21000 kPa high. Tested annular preventer to 1400 kPa low and 10500 kPa high.

Pressure test lower Kelly cock, inside BOP, stabbing valves etc as per program.

Pressure test casing to 10,000 kPa.

Installed wear bushing.

Big Eagle pressure tester provided the BOP pressure test service,

C.4 MAIN HOLE 222 MM SECTION (510- 1341 m MD)

C.4.1 SECTION OVERVIEW

Ran in hole with 222 mm PDC bit & directional BHA. Tagged cement at 494 m. Displaced water in hole with 1200 kg/m^3 Alpha Plus base invert mud. Drilled out 244.5 mm casing shoe track and new formation from 510 m to 513 m.

Circulated hole, pulled to casing shoe and performed formation integrity test to 21.5 kPa/m gradient. Applied 5000 kPa on surface with 1200 kg/m3 mud in hole for 10 minutes. Refer to attachment E_1 Formation integrity test

Drilled to core point at 1170 m with an average ROP of 17.5 m/hr. Controlled ROP from 1051 m to core point. Tripped in with 54 m core barrels. Cut core #1 from 1170-1204 m. Pulled out due to core jam, Core recovery for core #1 was 85%. Cut core #2 from 1204-1222 m. Core jammed after cutting 18 m. Core recovery for core #2 was 91 %. Cut core #3 from 1222-1241 m. Core jammed. Core recovery for core #3 was 97%.Cut core #4 from 1241-1257 m. Core jammed in the shoe. Tripped out. Core recovery from core # 4 was 97%. Cut core # 5 from 1257-1259 m. Core jammed. Core recovery was 94 %. Core #6 jammed after cutting 1 m core. Drilled with directional motor from 1259 m to 1270 m. Tripped out. Cut core # 7 from 1270-1303 m. Core recovery for core # 7 was 97.5%. Drilled 222 mm hole with directional motor from 1303 to 1341 m TD.

Ran wireline logs. 177.8mm casing was ran to well TD and cemented to surface with 7 m^3 of good cement return. Bumped plug, increased pressure to 21000 kPa and held it for 10 min to pressure test the casing. Installed retrievable bridge plug at 475m. Installed tubing spool and suspension valve and cap.

C.4.2 MAIN HOLE SECTION SUMMARY

	Remarks
Well control	279mm, 21000 MPa (11"-3000) BOP stack (Annular preventer, 101 mm pipe ram, Shear blind ram, 101 mm pipe ram). Refer to attachment E_3 well control set up
H2S Service	As the well was exploration well. H2S service including H2S detector and air package and full time technician was operational from spud to the end of the well.
Drilling	➢ Drilled 222mm section with a motor and MWD to 1170m. ➢ Cut six cores from 1170-1259 m. ➢ Drilled from 1258 m to 1270 m. ➢ Cut core from 1270 m to 1303 m. ➢ Drilled from 1303 m to 1341 m TD.
Drilling fluid	Alphaplus base invert. MW 1260 kg/m^3 at section TD. Refer to C.4.4 222mm section drilling fluid and attachment E_11 daily drilling fluid reports
Bit& BHA	Refer to C.4.5 Drilling parameters& Bit &BHA (222mm hole section) for detailed Bit& BHA report and drilling parameters.
Mud Logging	Mud logging service was utilized from surface to well TD.
Formations	Refer to geology report
Hydrocarbon show	No Hydrocarbon show. Some gas cuttings while drilling Canol shale
Hole deviation	Drilled vertically to core point with directional motor. Inclination at 1341 m was 0.4 degree. Refer to C.4.6 , C.4.7 Directional well plot and attachment E_2 directional survey& plot

Lost of Circulation	Minor Seepage Losses
Logging /coring	Conducted seven coring runs. Cut cores from 1670-1838 m. Ran wireline logs at TD.
Casing	177.8mm casing ran to TD and cemented with return to surface. Refer to C.4.8 and C.4.9 for casing & cementing.

C.4.3 LESSON LEARNED

Operations	Remarks
Vertical Drilling	Main hole was drilled with a directional motor to maintain the verticality. Total sliding time was 7.7% of cumulative drilling time. No deviation tendency was encountered in main hole.. Refer to C.4.6 , C.4.7 Directional well plot and attachment E 2 directional survey& plot
Coring	Core jamming was encountered on each run due highly fractured formation. Most of the jams happened in shoe.

C.4.4 DRILLING FLUID

Refer to Drilling Fluid reports attachment E 10 daily drilling fluid reports for detailed mud mood properties and chemical consumption.

Alpha Plus base invert oil mud was used in drilling entire 222 mm hole. Commenced drilling 222 mm hole with 1200 Kg/m^3 increased during drilling to 1260 Kg/m^3 at TD. Mud weight was increased to keep the background gas below 5%.

	Volume delivered to well site (m^3)	Loss Cutting retention & seepage (m^3)	Returned to Mud company Base in Ft. Nelson
Alpha Plus base Megadril invert 90:10	202	29	173
Alpha Plus base oil	27		27

The following are the mud parameters range.

Mud Parameter	
Mud Type	Alpha Plus base Invert
Density (kg/m^3)	1200-1260
Viscosity (sec/liter)	48-57
PV (mPa-sec)	14-19
YP (Pa)	3-4
Gel Strengths 10sec / 10min	2.5-3.5/5-7
Solids (%)	14-17%

C.4.5 DRILLING PARAMETERS& BIT &BHA (222 MM HOLE SECTION)

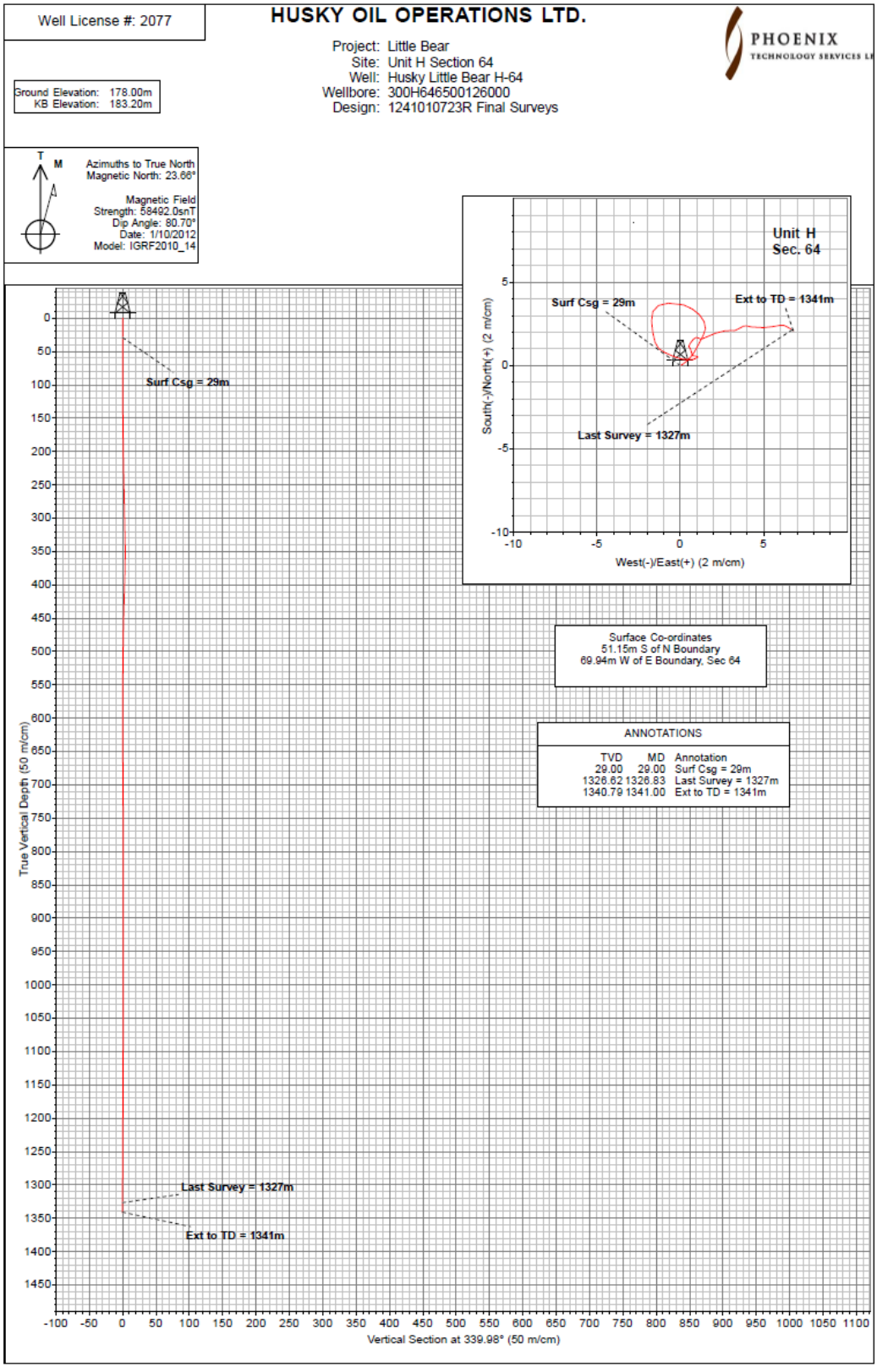
Bit No/ Run	Size (mm)	Make/ Type	IADC Code	TFA (mm^2) Nozzle (mm)	MD In/ Out (m)	Total Drilled (m)	Drilling Hours	ROP m/hr	WOB KdaN	Surface RPM	Pump output (m^3)	Pump press (KPa)	Mud Wt Kg/m^3	Bit condition	Remark
3	222	Smith PDC Mi516	M123	847 12.7/12.7/12.7/12.7/12.7/ 9.5/9.5/9.5	510/1170	660	37.75	17.5	2-3	40	1.45	9500	1200	1-1-WT-A-X-0-NO-BHA	Drilled out from surface casing shoe to core point.
BHA: 222mm Bit+ 167 mm Motor + UBHO +MWD +Monel +Pump out sub + 2X 165 mm DC+165 mm Jar+ 2X165mm DC + x-over+ 8 x 101mm HWDP.															
4	222	Hughes Coring Bit BHC406			1170/1204	34	6.25	5.4	3	55	1.2	7500	1280	1-1-WT-A-X-0-NO-BHA	Cored jammed.
BHA: 222mm core Bit+ 6 x 171 core barrels + Top Sub+171 mm Jar+ Float Sub + Pump out Sub + 4X165mm DC + x-over+ 8 x 101mm HWDP.															
5RR	222	Hughes Coring Bit BHC406			1204/1222	18	3.0	6.0	3	55	1.2	8000	1280	1-1-WT-A-X-0-NO-BHA	Cored jammed
BHA: 222mm core Bit+ 6 x 171 core barrels + Top Sub+171 mm Jar+ Float Sub + Pump out Sub + 4X165mm DC + x-over+ 8 x 101mm HWDP.															
6	222	Hughes Coring Bit BHC406			1222/1241	19	4.25	4.5	3	45	1.2	7500	1280	1-1-WT-A-X-0-NO-BHA	Cored jammed after cutting 19 m core
BHA: 222mm core Bit+ 6 x 171 core barrels + Top Sub+171 mm Jar+ Float Sub + Pump out Sub + 4X165mm DC + x-over+ 8 x 101mm HWDP.															
7RR	222	Hughes Coring Bit BHC406			1241/1256	15	3.5	4.3	3	45	1.2	7800	1250	1-1-WT-A-X-0-NO-BHA	Core jammed
BHA: 222mm core Bit+ 6 x 171 core barrels + Top Sub+171 mm Jar+ Float Sub + Pump out Sub + 4X165mm DC + x-over+ 8 x 101mm HWDP.															
8RR	222	Hughes Coring Bit BHC406			1256/1258	2	1.5	1.3	2	40	1.2	8000	1250	1-1-WT-A-X-0-NO-BHA	Core jammed.
BHA: 222mm core Bit+ 6 x 171 core barrels + Top Sub+171 mm Jar+ Float Sub + Pump out Sub + 4X165mm DC + x-over+ 8 x 101mm HWDP.															

9RR	222	Hughes Coring bit BHC406			1258/1259	1.0	1.0	1.0	3	40	1.2	8700	1250	1-1-WT-A-X-0-NO-BHA	Core jammed.
BHA: 222mm core Bit+ 6 x 171 core barrels + Top Sub+171 mm Jar+ Float Sub + 4X165mm DC + x-over+ 8 x 101mm HWDP.															
10	222	Smith PDC Mi516	M123	847 12.7/12.7/12.7/12.7/12.7/ 9.5/9.5/9.5	1259/1270	11	1.25	8.8	4	40	1.45	9300	1230	1-1-WT-A-X-0-NO-BHA	Pulled out to pick up core barrels
BHA: 222mm Bit+ 167 mm Motor + UBHO +MWD +Monel +Pump out sub + 2X 165 mm DC+165 mm Jar+ 2X165mm DC + x-over+ 8 x 101mm HWDP.															
11	222	Hughes Coring bit BHC406			1270/1302	32	5.75	5.6	4	55	1.2	7100	1225	1-1-WT-A-X-0-NO-BHA	Core jammed
BHA: 222mm core Bit+ 6 x 171 core barrels + Top Sub+171 mm Jar+ Float Sub + Pump out Sub + 4X165mm DC + x-over+ 8 x 101mm HWDP.															
12	222	Smith PDC Mi516	M123	847 12.7/12.7/12.7/12.7/12.7/ 9.5/9.5/9.5	1302/1341	39	4.75	8.2	6	35	1.45	9700	1240	1-1-WT-A-X-0-NO-LOG	
BHA: 222mm Bit+ 167 mm Motor + UBHO +MWD +Monel +Pump out sub + 2X 165 mm DC+165 mm Jar+ 2X165mm DC + x-over+ 8 x 101mm HWDP.															
13	222	J&L Retip		380 12.7/12.7/12.7	1341/1341	0	0				1.45	9000	1260	2-2-WT-A-X-0-NO-TD	Cleanout Trip
BHA: 222mm Bit+ 2X 165 mm DC+165 mm Jar+ 2X165mm DC + x-over+ 8 x 101mm HWDP.															

C.4.6 DIRECTIOANL DRILLING &SURVEY

Refer to C.4.7 Directional well plot for directional plot and attachment E_2 directional survey& plot for well survey.

C.4.7 DIRECTIONAL WELL PLOT



C.4.8 MAIN HOLE CASING SPECIFICATION

Interval (m)		Size	Weight	Tubular	Thread	Pipe ID	Drift	Coupling
From	To	(mm)	(kg/m)	Grade	Type	(mm)	(mm)	OD (mm)
0	1341	177.8	34.2	L-80	LT&C	161.7	158.5	194.46

Casing Performance Properties						
Burst KPa	Collapse KPa	Body yield strength daN	Joint strength daN	Make up Torque N-m		
				Min	Optimum	Max
43,700	26,400	236,000	196,600	4420 N-m (3260 ft-lb)	5900 N-m (4350 ft-lb)	7380 N-m (5440 ft-lb)

C.4.8.1 MAIN HOLE CASING STRING DETAILS

Qt.	Length	Description	Centralization
1	0.45m	177.8 mm Float shoe PDC drillable	
2	22.81m	177.85mm Csg Joint	C-1 One Bow spring at mid point over stop collar
1	0.45m	177.8 mm Float shoe PDC drillable	C-1 One Bow spring per joint on 3 joints above Float Collar
124	1317 m	177.8 mm Csg Joint	C-4 One every 4jts (50m) up to surface

C.4.9 MAIN HOLE CASING CEMENT

Type		**Composition**	**Density/ thickening time**	**Volume**	**Remarks**
Pre flush		Chemical wash	1300 Kg/m^3	3 m^3	
Cement	Lead	Hilite 1.2% B348+ 1.0% S001 +0.2% D046	1400 Kg/m^3	19.6 m^3 14.8 tonne	40% excess over Caliper volume on lead and tail
	Tail	Class G 0.2% D46+ 0.5% D65+ 0.4% D167	1900 Kg/m^3	11.2 m^3 15.2 tonne	Displaced cement with water containing 0.8% corrosion inhibitor (KI3908).
➢ 7.0 m^3 good cement returns. Bumped plug, increased pressure to 21000 kPa and held it for 10 minutes to pressure test casing.					

C.4.10 SUSPENSION

Pressure tested casing using 21000 kPa at surface after bumping the plug.

Waited on cement for 6 hours. Lifted BOP stack. cut the casing. Nippled down BOP. Installed tubing spool Pressure tested the seals to 14000 kPa.

Set a wire line retrievable Bridge plug in 177.8 mm casing at 475m.

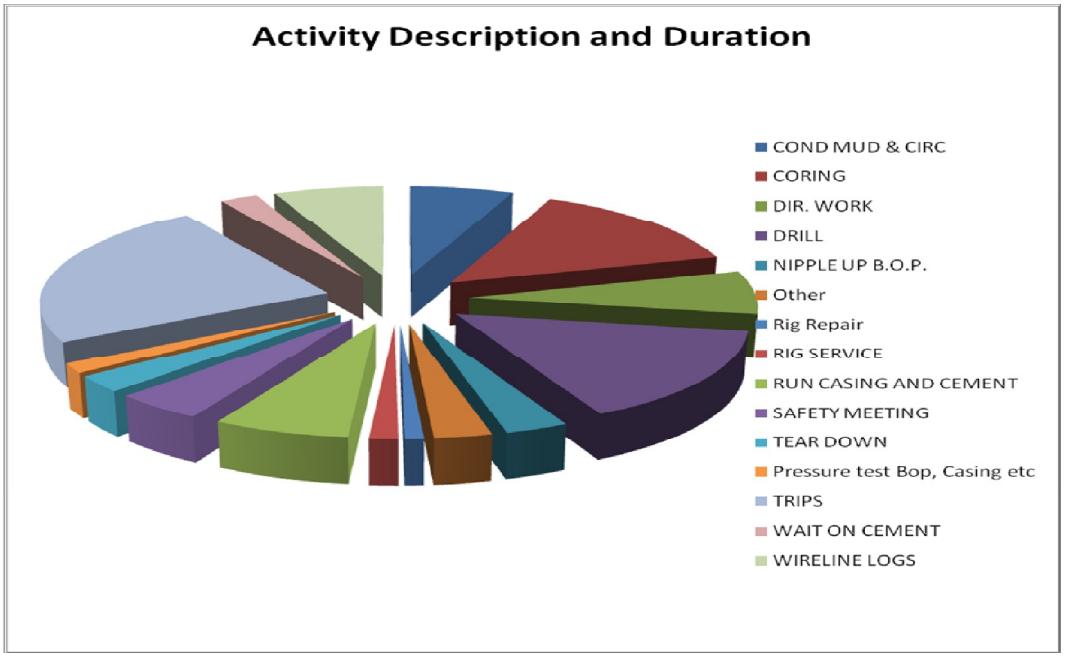
Installed 7-1/16" & suspension valve and pressure tested bridge plug and wellhead with 21000 kPa for 10 minutes. Refer to B.2 final well status for well schematics after release and E_12 Well Termination Report.

D TIME AND NPT ANALYSIS

Chart D1 and table show detail time breakdown from Spud to Rig Release respectively. It is prepared by the category of operations and services.

Spud to rig Release time was 492 hrs (20.5 days). There was no major downtime or NPT.

Activity Description	Duration (hrs)	% Total Time
COND MUD &CIRC	31.5	6.4
CORING	70	14.2
DIR. WORK	34.5	7.0
DRILL	74	15.0
NIPPLE UP B.O.P	15.75	3.2
OTHER	14.5	2.9
RIG REPAIR	4.75	1.0
RIG SERVICE	7.25	1.5
RUN CASING AND CEMENT	34	6.9
SAFETY MEETING	22.5	4.6
TEAR DOWN	13.25	2.7
TEST BOP	7.75	1.6
TRIPS	117.25	23.8
WAIT ON CEMENT	11.5	2.3
WIRELINE LOGS	33.5	6.8
TOTAL TIME	**492**	**100.0**



E ATTACHMENTS

E.1 FORMATION INTEGRITY TEST

Big Eagle Services

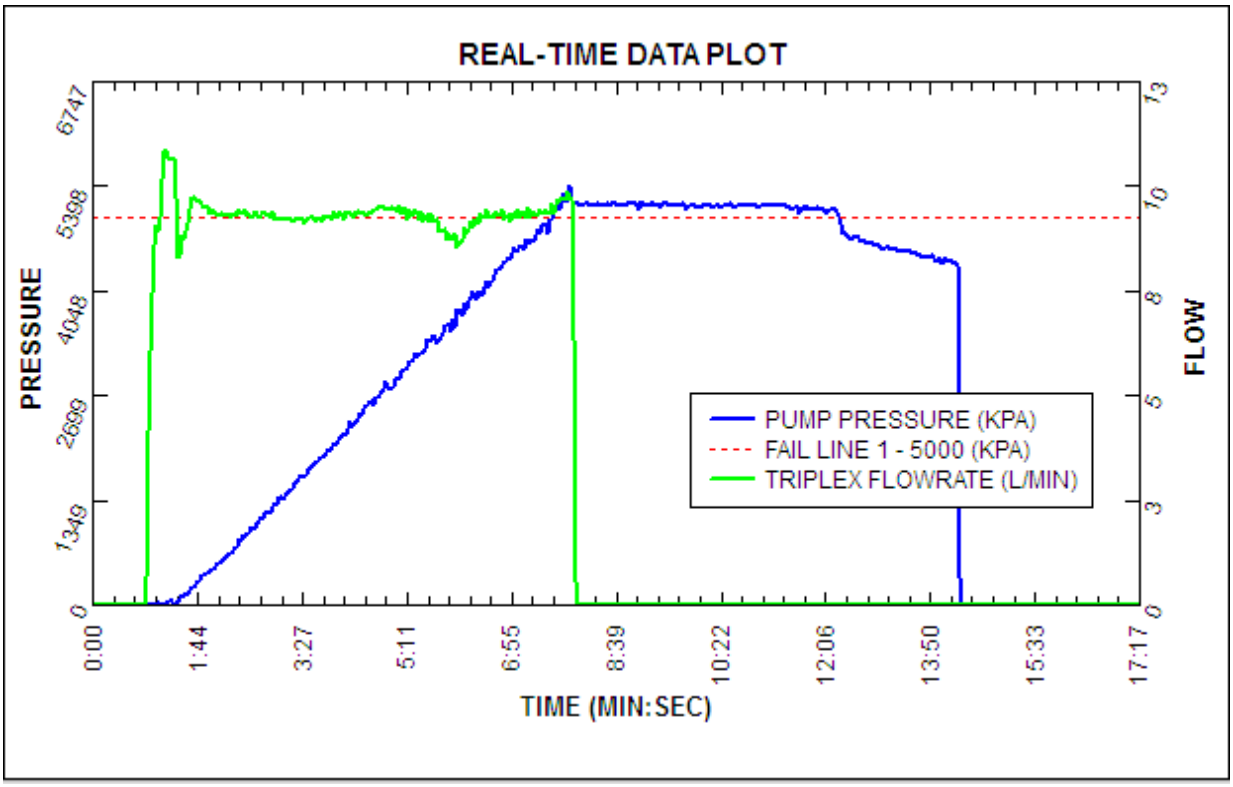
JOB REPORT

Company: Husky Oil
Contact: Cal Conklin
Location: Husky Little Bear H-64

Email:

Date February 25, 2012
Start Time 0:19:03
End Time
PO#:
AFE#:
LSD#: Little bear H-64
Phone#:

Unit#: PT112
Operator: Husky oil
Swamper: N/A
Fluid Pumped: 68 Liters
Chemical Pumped: Water



Comments: Formation integrity test

E.2 DIRECTIONAL SURVEY

Well Licen□e □: 2077

HUSKY OIL OPERATIONS LTD.

Pro□ect: Little Bear
Site: Unit H Section 64
Well: H□□ky Little Bear H-64
Well□ore: 300H646500126000
De□i□n: 1241010723R Final S□rvey□

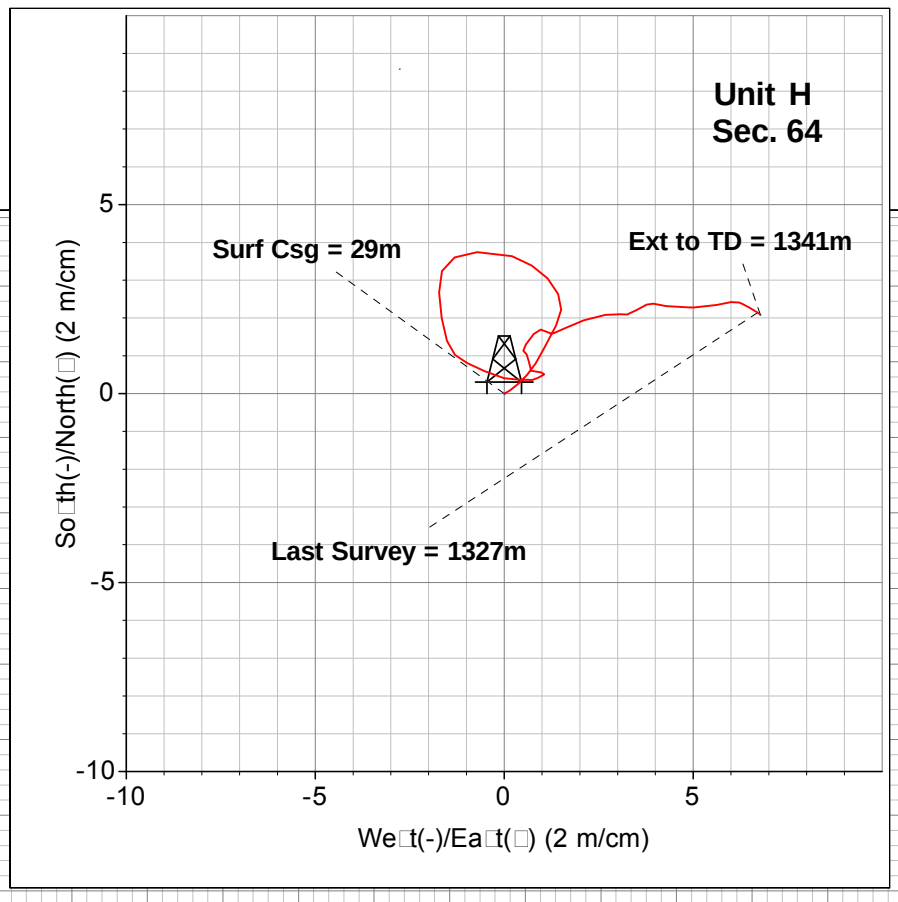
PHOENIX TECHNOLOGY SERVICES LP

Gro□nd Elevation: 178.00m
KB Elevation: 183.20m

T M

A□im□th□ to Tr□e North
Ma□netic North: 23.66°

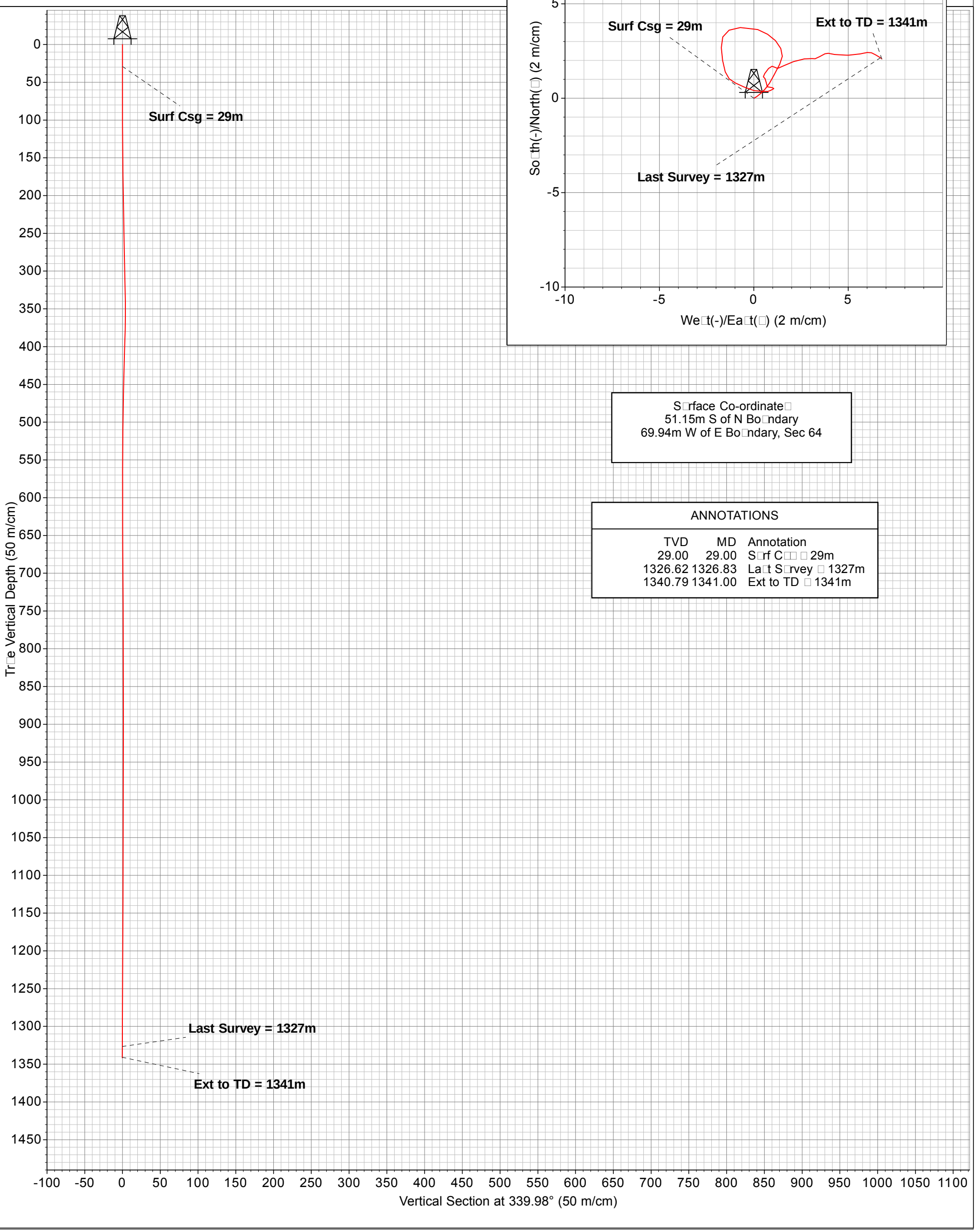
Ma□netic Field
Stren□th: 58492.0□nT
Dip An□le: 80.70°
Date: 1/10/2012
Model: IGRF2010_14



S□rface Co-ordinate□
51.15m S of N Bo□ndary
69.94m W of E Bo□ndary, Sec 64

ANNOTATIONS

TVD	MD	Annotation
29.00	29.00	S□rf C□□ □ 29m
1326.62	1326.83	La□t S□rvey □ 1327m
1340.79	1341.00	Ext to TD □ 1341m



Phoenix Technology Services LP

Survey Report

Database:	Canada Compass DB	**Local Co-ordinate Reference:**	Well Husky Little Bear H-64
Company:	HUSKY OIL OPERATIONS LTD.	**TVD Reference:**	KB act. @ 183.20m (Nabors 23)
Project:	Little Bear	**MD Reference:**	KB act. @ 183.20m (Nabors 23)
Site:	Unit H Section 64	**North Reference:**	True
Well:	Husky Little Bear H-64	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	300H646500126000		
Job Number	1241010723R Final Surveys		

Project Little Bear

Map System:	Universal Transverse Mercator	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Zone 09N (132 W to 126 W)		

Site Unit H Section 64

Site Position:		**Northing:**	7,199,322.99 m	**Latitude:**	64.89
From:	Map	**Easting:**	633,013.97 m	**Longitude:**	-126.19
Position Uncertainty:	0.00 m	**Slot Radius:**	335.28 mm	**Grid Convergence:**	2.54 °

Well Husky Little Bear H-64

Well Position	**+N/-S**	0.00 m	**Northing:**	7,199,322.99 m	**Latitude:**	64° 53' 29.596 N
	+E/-W	0.00 m	**Easting:**	633,013.97 m	**Longitude:**	126° 11' 23.931 W
Position Uncertainty		0.00 m	**Wellhead Elevation:**	m	**Ground Level:**	178.00 m

Wellbore 300H646500126000

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010_14	1/10/2012	23.66	80.70	58,492

Job Number 1241010723R Final Surveys

Audit Notes: Well License # 2077

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (m)	+N/-S (m)	+E/-W (m)	Direction (°)
	0.00	0.00	0.00	339.98

Survey Program **Date** 3/12/2012

From ()	To (m)	Survey (Wellbore)	Tool Name	Description
0.00	1,341.83	1241010723R Final Surveys (300H646500	MWD	MWD

Survey

Measured Depth (m)	Inclination (°)	Azimuth (°)	Vertical Depth (m)	Subsea Depth (m)	+N/-S (m)	+E/-W (m)	Vertical Section (m)	Dogleg Rate (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)
0.00	0.00	0.00	0.00	183.20	0.00	0.00	0.00	0.000	0.000	0.000
Surf Csg = 29m										
29.00	0.00	0.00	29.00	154.20	0.00	0.00	0.00	0.000	0.000	0.000
42.00	0.20	69.40	42.00	141.20	0.01	0.02	0.00	0.462	0.462	0.000
72.00	0.40	53.80	72.00	111.20	0.09	0.15	0.03	0.214	0.200	-15.600
109.52	0.50	50.50	109.52	73.68	0.27	0.39	0.12	0.083	0.080	-2.639
136.58	0.80	39.20	136.58	46.62	0.49	0.60	0.26	0.360	0.333	-12.528
163.98	0.80	34.80	163.97	19.23	0.80	0.83	0.47	0.067	0.000	-4.818
191.53	1.20	26.00	191.52	-8.32	1.21	1.06	0.78	0.465	0.436	-9.583

Phoenix Technology Services LP

Survey Report

Database:	Canada Compass DB	**Local Co-ordinate Reference:**	Well Husky Little Bear H-64
Company:	HUSKY OIL OPERATIONS LTD.	**TVD Reference:**	KB act. @ 183.20m (Nabors 23)
Project:	Little Bear	**MD Reference:**	KB act. @ 183.20m (Nabors 23)
Site:	Unit H Section 64	**North Reference:**	True
Well:	Husky Little Bear H-64	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	300H646500126000		
Job Number	1241010723R Final Surveys		

Survey

Measured Depth (m)	Inclination (°)	Azimuth (°)	Vertical Depth (m)	Subsea Depth (m)	+N/-S (m)	+E/-W (m)	Vertical Section (m)	Dogleg Rate (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)
219.85	1.50	28.80	219.83	-36.63	1.81	1.37	1.23	0.325	0.318	2.966
238.71	1.20	5.30	238.69	-55.49	2.22	1.51	1.57	0.991	-0.477	-37.381
257.17	1.50	335.40	257.14	-73.94	2.63	1.43	1.98	1.226	0.488	-48.592
276.05	1.60	317.70	276.02	-92.82	3.05	1.15	2.47	0.774	0.159	-28.125
294.50	1.80	301.00	294.46	-111.26	3.39	0.72	2.94	0.865	0.325	-27.154
312.93	1.80	289.80	312.88	-129.68	3.64	0.20	3.35	0.572	0.000	-18.231
340.72	2.10	265.50	340.65	-157.45	3.74	-0.71	3.76	0.941	0.324	-26.232
359.55	1.70	245.60	359.47	-176.27	3.60	-1.31	3.83	1.220	-0.637	-31.705
378.12	1.60	199.00	378.04	-194.84	3.24	-1.65	3.61	2.114	-0.162	-75.283
397.07	1.90	178.30	396.98	-213.78	2.68	-1.72	3.11	1.100	0.475	-32.770
415.68	2.30	171.10	415.57	-232.37	2.00	-1.66	2.45	0.771	0.645	-11.607
434.02	1.60	160.70	433.90	-250.70	1.40	-1.52	1.83	1.278	-1.145	-17.012
452.48	1.10	135.30	452.36	-269.16	1.03	-1.31	1.41	1.249	-0.813	-41.278
471.60	1.30	113.60	471.47	-288.27	0.81	-0.98	1.10	0.773	0.314	-34.048
495.00	1.20	116.50	494.87	-311.67	0.59	-0.52	0.74	0.152	-0.128	3.718
517.53	1.60	105.10	517.39	-334.19	0.41	0.00	0.38	0.647	0.533	-15.180
536.47	1.10	81.60	536.33	-353.13	0.36	0.43	0.19	1.166	-0.792	-37.223
554.92	0.30	118.60	554.78	-371.58	0.37	0.65	0.12	1.430	-1.301	60.163
573.69	0.30	68.60	573.55	-390.35	0.36	0.74	0.09	0.405	0.000	-79.915
591.98	0.70	70.80	591.83	-408.63	0.42	0.89	0.09	0.657	0.656	3.609
610.47	0.50	47.90	610.32	-427.12	0.51	1.06	0.11	0.501	-0.324	-37.155
637.80	0.70	259.70	637.65	-454.45	0.56	0.98	0.19	1.268	0.220	-162.678
666.16	0.50	307.50	666.01	-482.81	0.60	0.71	0.32	0.549	-0.212	50.564
694.31	0.70	12.50	694.16	-510.96	0.84	0.65	0.57	0.710	0.213	69.272
722.68	0.40	282.90	722.53	-539.33	1.04	0.59	0.77	0.850	-0.317	-94.748
750.61	0.30	4.60	750.46	-567.26	1.13	0.50	0.89	0.498	-0.107	87.755
778.08	0.50	32.40	777.93	-594.73	1.30	0.57	1.03	0.298	0.218	30.360
805.78	0.90	39.00	805.63	-622.43	1.57	0.78	1.21	0.441	0.433	7.148
833.69	0.30	136.30	833.53	-650.33	1.69	0.96	1.26	1.058	-0.645	104.586
861.30	0.50	93.40	861.14	-677.94	1.63	1.13	1.15	0.377	0.217	-46.614
889.17	0.20	220.40	889.01	-705.81	1.59	1.22	1.07	0.690	-0.323	136.706
916.90	0.50	67.80	916.74	-733.54	1.60	1.31	1.05	0.740	0.325	-165.092
935.27	1.50	65.70	935.11	-751.91	1.73	1.60	1.08	1.634	1.633	-3.430
953.78	1.90	68.00	953.61	-770.41	1.94	2.10	1.10	0.658	0.648	3.728
972.73	1.70	85.50	972.55	-789.35	2.08	2.68	1.04	0.922	-0.317	27.704
991.58	0.80	92.90	991.40	-808.20	2.10	3.09	0.91	1.452	-1.432	11.777
1,010.01	0.20	82.40	1,009.83	-826.63	2.09	3.25	0.86	0.984	-0.977	-17.092
1,037.78	0.90	62.20	1,037.60	-854.40	2.20	3.49	0.88	0.773	0.756	-21.822
1,065.84	0.40	61.30	1,065.65	-882.45	2.35	3.77	0.92	0.535	-0.535	-0.962
1,093.29	0.40	102.80	1,093.10	-909.90	2.38	3.95	0.88	0.310	0.000	45.355
1,120.96	1.00	99.20	1,120.77	-937.57	2.32	4.28	0.71	0.652	0.651	-3.903
1,148.83	1.40	89.70	1,148.64	-965.44	2.28	4.86	0.48	0.479	0.431	-10.226

Phoenix Technology Services LP

Survey Report

Database:	Canada Compass DB	**Local Co-ordinate Reference:**	Well Husky Little Bear H-64
Company:	HUSKY OIL OPERATIONS LTD.	**TVD Reference:**	KB act. @ 183.20m (Nabors 23)
Project:	Little Bear	**MD Reference:**	KB act. @ 183.20m (Nabors 23)
Site:	Unit H Section 64	**North Reference:**	True
Well:	Husky Little Bear H-64	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	300H646500126000		
Job Number	1241010723R Final Surveys		

Survey

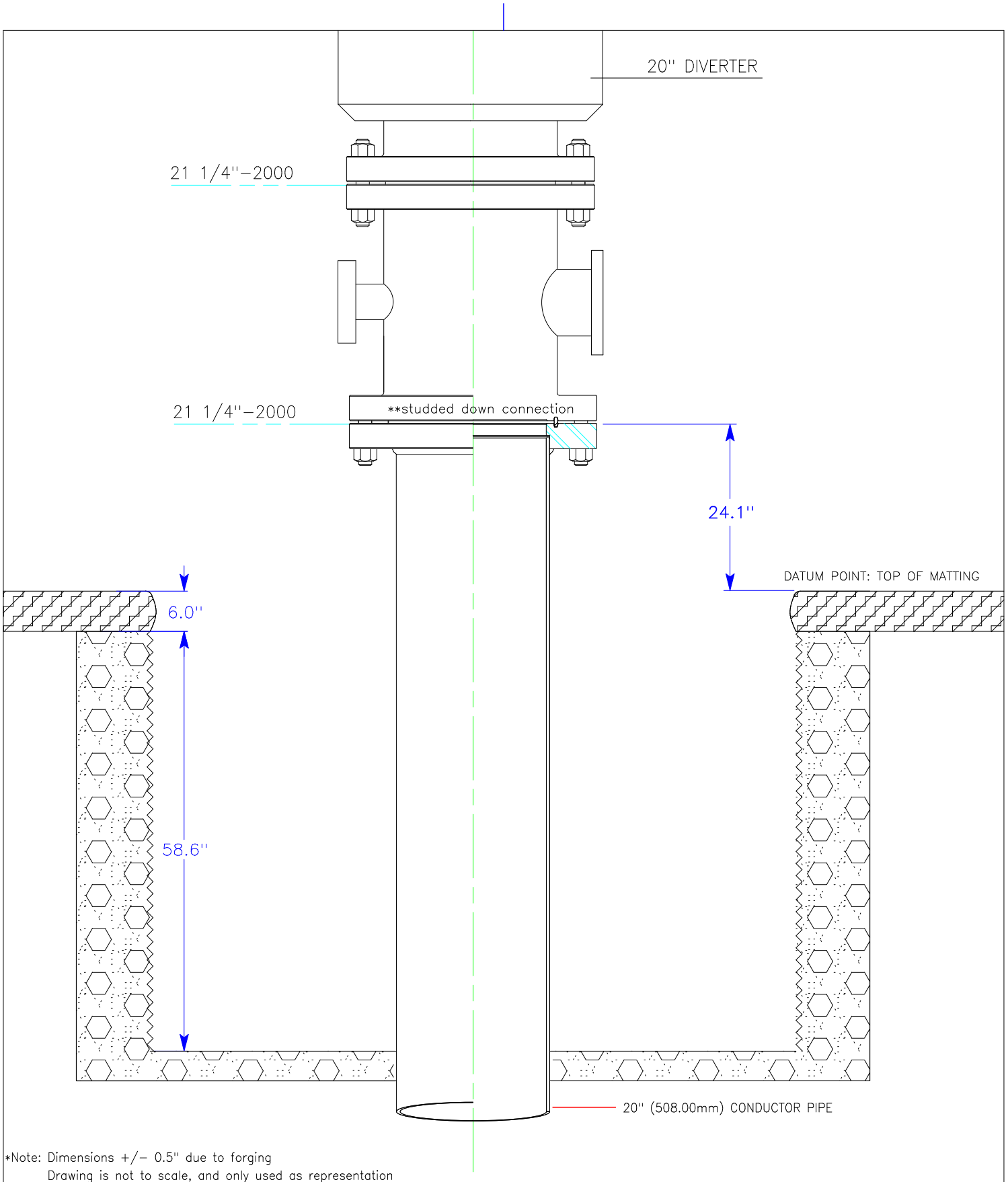
Measured Depth (m)	Inclination (°)	Azimuth (°)	Vertical Depth (m)	Subsea Depth (m)	+N/-S (m)	+E/-W (m)	Vertical Section (m)	Dogleg Rate (°/30m)	Build Rate (°/30m)	Turn Rate (°/30m)
1,155.18	1.30	91.80	1,154.98	-971.78	2.28	5.01	0.43	0.527	-0.472	9.921
1,186.56	1.00	73.30	1,186.36	-1,003.16	2.35	5.63	0.28	0.453	-0.287	-17.686
1,214.26	0.60	86.80	1,214.05	-1,030.85	2.42	6.00	0.22	0.476	-0.433	14.621
1,242.52	0.30	107.90	1,242.31	-1,059.11	2.41	6.22	0.13	0.359	-0.318	22.399
1,255.00	0.20	120.70	1,254.79	-1,071.59	2.39	6.27	0.10	0.274	-0.240	30.769
1,289.96	0.50	114.50	1,289.75	-1,106.55	2.29	6.46	-0.06	0.259	0.257	-5.320
Last Survey = 1327m										
1,326.83	0.40	129.70	1,326.62	-1,143.42	2.14	6.71	-0.28	0.126	-0.081	12.368
Ext to TD = 1341m										
1,341.00	0.36	135.50	1,340.79	-1,157.59	2.08	6.78	-0.37	0.114	-0.080	12.286
1,341.83	0.36	135.88	1,341.62	-1,158.42	2.08	6.78	-0.37	0.114	-0.076	13.628

Survey Annotations

Measured Depth ()	Vertical Depth ()	Local Coordinates +N/-S ()	Local Coordinates +E/-W ()	Comment
29.00	29.00	0.00	0.00	Surf Csg = 29m
1,326.83	1,326.62	2.14	6.71	Last Survey = 1327m
1,341.00	1,340.79	2.08	6.78	Ext to TD = 1341m

Checked By: _____ Approved By: _____ Date: _____

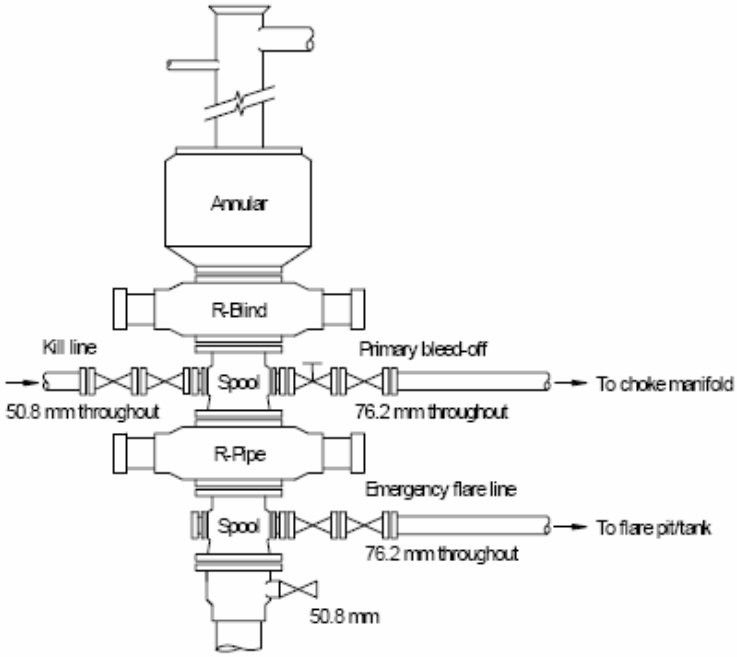
E.3 WELL CONTROL SETUP



*Note: Dimensions +/– 0.5" due to forging
Drawing is not to scale, and only used as representation

HUSKY et al LITTLE BEAR N–9 AND H–64 NABORS 23	DWN.		11/02/11	EDMONTON, AB. CANADA	DRAWING No. C2041 PAGE 3 of 10 REV 2
	CHK.				
	APPR.				
		BY:	DATE		

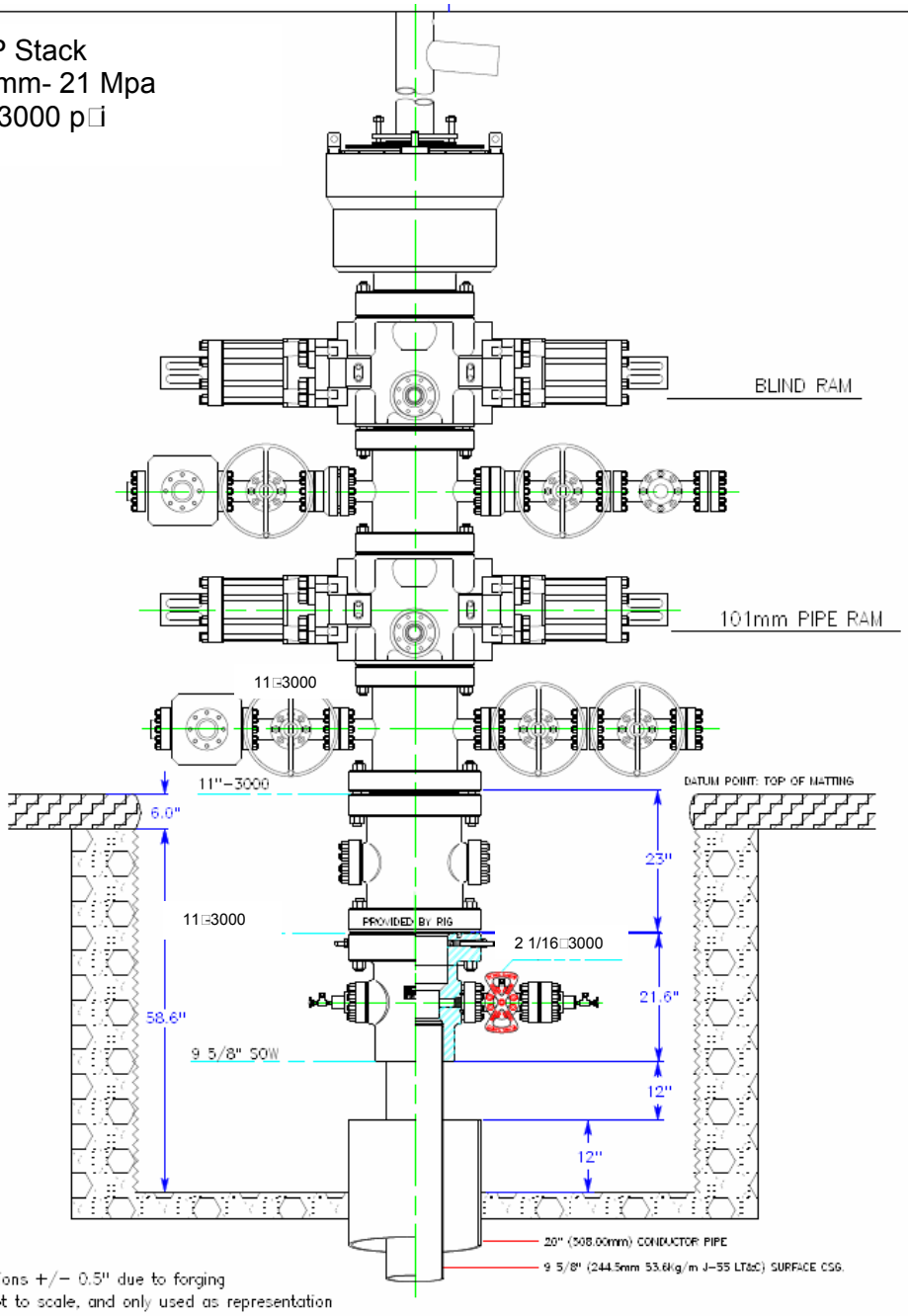
F.2.2 BOP CLASS IV □WITH EMERGENCY FLARE LINE



Note:
1. Ram type BOPs manufactured with integral outlets may be used in place of the drilling spools.
2. See Appendix 2 for equipment symbols.

Figure 4. Emergency flare line configuration for high-hazard area (southeastern Alberta) and for type 3 and type 4 surface casing reductions

BOP Stack
279mm- 21 Mpa
11□3000 p□i



•Note: Dimensions +/- 0.5" due to forging
Drawing is not to scale, and only used as representation

HUSKY et al LITTLE BEAR N-9 AND H-64 NABORS 23	DWN.		11/02/11	EDMONTON, AB. CANADA	DRAWING No. C2041 PAGE 6 of 10 REV 2
	CHK.				
	APPR.				
		BY:	DATE		

E.4 RIG SPECIFICATIONS & LAYOUT

NABORS DRILLING
Rig Inventory and Specifications

Rig No.: 23

Effective Date of Inventory: April 2010

Rig depth rating 2,600 m using 114 mm Drill Pipe

Number of loads (w/ boiler) 19, No crane required

A. Drawworks: Make: TSM 6000A — Drum: 43.18 cm dia. x 99.06 cm long

Maximum Hoisting Capacity	113,000	daN
Number of Hoisting Speeds	5	
Auxiliary Brake Type	Hydromatic	

B. Rig Power: Make: Caterpillar 3406 C

Maximum Power	390	kW
Continuous Power	343	kW

C. Derrick: Make: Mastco — Type: Telescoping Double — Height: 31.1 m

Normal Number of Lines Strung	8			
Maximum Allowable Working Load (API rating)	124,600	daN w/	8	lines
Contractor's Allowable Working Load	111,200	daN w/	8	lines

D. Substructure: Make: Mastco — Type: Step Down — Self leveling

Maximum Load Capacity Set back	89,000	daN	12.8 m long	
Maximum Load Capacity Rotary	89,000	daN	4.27 m wide	
KB - Ground	4.8 m	Vertical Clearance for BOPs	3.81 m	
		c/w BOP handling system		

E. Rotary Table:

Make	Gardner Denver		
Type	17.5	Opening	444.5 mm
Contractor's Operating RPM Max.	180	Min.	1

F. Swivel:

Make/ Model	Manufacturer's Maximum Allowable Load		Manufacturer's Maximum Rotary Load	
National N-47	133,500	daN	111,200	daN

G. Traveling Equipment:

	Make/ Model	Manufacturer's Maximum Allowable Load	
Bails	BJ 250 Ton	208,000	daN
Elevator	WTM 150 Ton	133,500	daN
Block/Hook	BJ	133,500	daN

H. Drilling Line:

Line Size	28.5	mm	Line Type	Wire Rope Industries
Single Line Breaking Strength	65,000	daN		

I. Drill Pipe: c/w 1 independent pipe tub

114	mm OD,	Grade	E	, 24.7	kg/m,	Conn.	4 1/2" XH	, 2,600	m
	mm OD,	Grade		,	kg/m,	Conn.		,	m

c/w three self contained hydraulic operated pipe tubs

J. Drill Collars:

203	mm OD,	70	mm ID,	Conn.	6 5/8" Reg	joints available	2
165	mm OD,	57	mm ID,	Conn.	4 1/2" XH	joints available	20
	mm OD,		mm ID,	Conn.		joints available	

K. Mud Pump: Make & Model Gardner Denver PZ8 Stroke 203 mm

Pump powered by Caterpillar 3412 C @ 560 kW

Liner Sizes (mm)	Maximum Strokes/min.	Minimum Strokes/min.	Manufacturer's Maximum Pump Pressure (kPa)	Contractor's Maximum Pump Pressure (kPa)
127	130	60	23,700	19,000
139.7	130	60	19,600	15,700
152.4	130	60	16,400	13,200

L. Mud Tanks:

Total Volume	75	m^3			Number of Tanks	1
Active (Useable) Volume	65	m^3			Number of Compartments	6
Pill Tank Volume	2.5	m^3				
Trip Tank Volume	2.0	m^3				
Independent Mud Mixing System	Pump 1	Type	Mission magnum	Size	127mm x 152mm x 254mm	
	Pump 2	Type	Mission magnum	Size	127mm x 152mm x 254mm	
Agitator Type	Brook Hansen 7 1/2 HP		Number of Agitators	3		
Independent Circulating Pump is supplied for hole fill			Brico 50.8 mm			

M. Shale Shakers:

Make	Derrick Flo-Line Cleaners	Number	2
Vibrating Speed	1,770	Cycles/min.	

N. Mud Gas Separator:

Location	Shaker Tank	
Height Above Mud Level	2.0	m (Mud level to top of vessel)
Vessel Diameter	762	mm
Liquid Inlet Line Size	101.6	mm
Gas Outlet Size	203.2	mm
Open Bottom		
Internal Baffles		
Nace Certified		

O. Blowout Prevention:

BOP	Make	Type	Size (mm)	Pressure Rating (kPa)	Nace Trim
Annular	Hydril	GK	279.0	21,000	Yes
Pipe Ram	Shaffer	LWS Single	279.0	21,000	Yes
Blind Ram/Pipe Ram	Shaffer	LWS Single	279.0	21,000	Yes

HCR Valve: Nace gate valve Kill Line Valves: 76mm Nace gate valves

Accumulator: Oilco 5 station
Size: 400 litres Rating: 21,000 kPa

P. Manifold:

a) The Master BOP controls are located at the accumulator and remote controls located at the driller's station

b) Pressure Rating	21,000	kPa
Kill Line Size	76	mm
Choke Line Size	76	mm
Valve Type	Gate	
Size	76 x 76 x 76	mm
c) Nace Trim		

Q. Light Plants:

	Powered by	Output kW
Number 1	Caterpillar 3406 @ 520 HP	320
Number 2	Caterpillar 3306 @ HP	200

R. Instrumentation: Electronic Drilling Recorder

S. Boiler: Make: Saskatoon Type: Diesel Output: 75 kW
c/w 14 m^3 water c/w 9 m^3 fuel

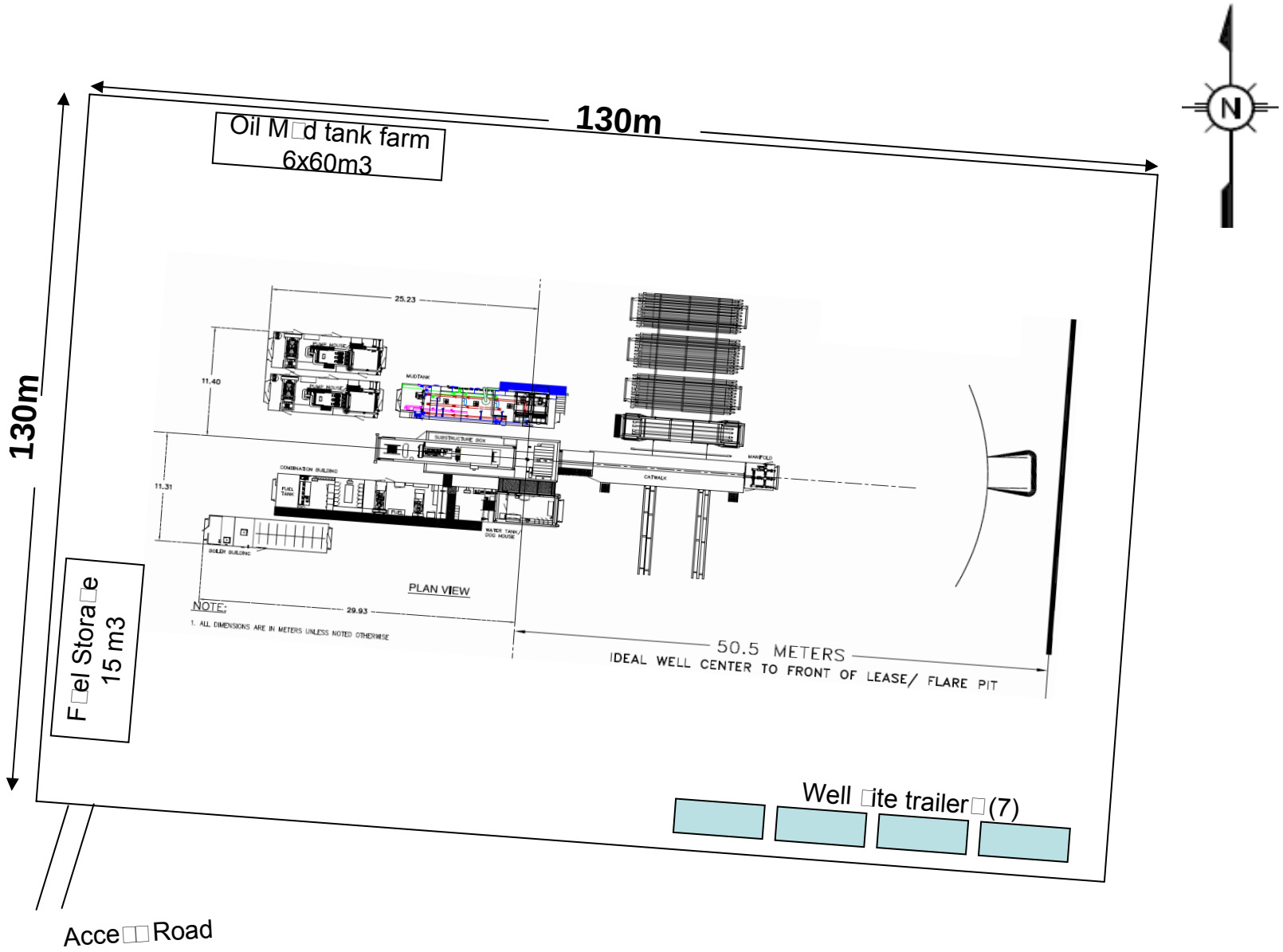
T. Kelly Spinner: Make: Hydraulic Type: Cesco 100 Size: 197 mm

U. Drill Pipe Spinner: Make: Type Make: Spinner Hawk

V. Fuel Storage: 18,000 litres c/w two transfer pumps

W. Water Storage: 68,000 litres c/w two transfer pumps

Rig Nabors 23 & Site layout (H-64)

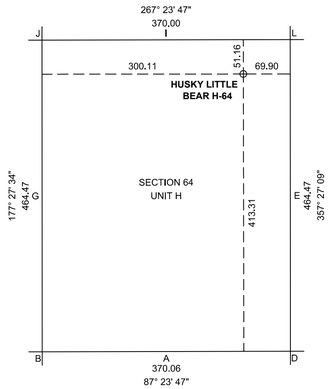


E.5 WELL LOCATTION SURVEY

CANADA LANDS SURVEYS RECORDS

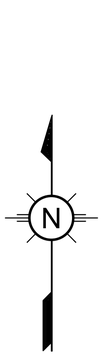
CANADA LANDS SURVEYS RECORDS

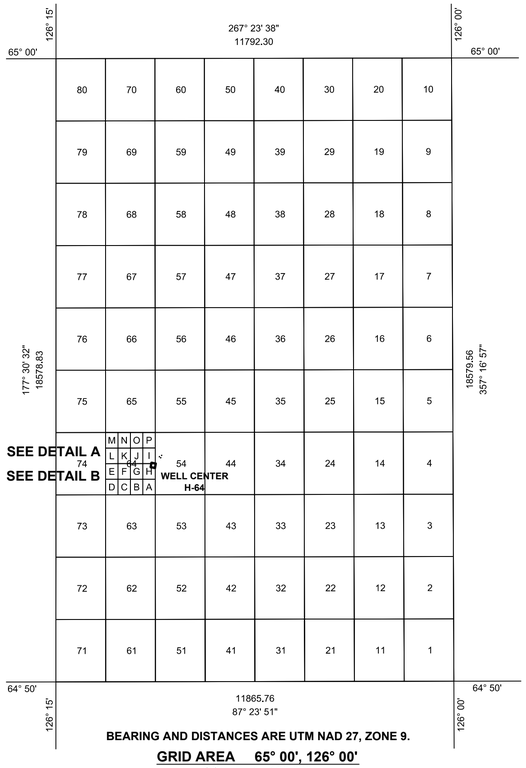
CANADA LANDS SURVEYS RECORDS



UNIT H, SECTION 64
BEARING AND DISTANCES ARE UTM NAD 27, ZONE 9.

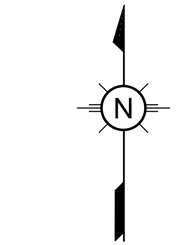
SURFACE UNIT DETAIL B
SCALE : 1 : 5000

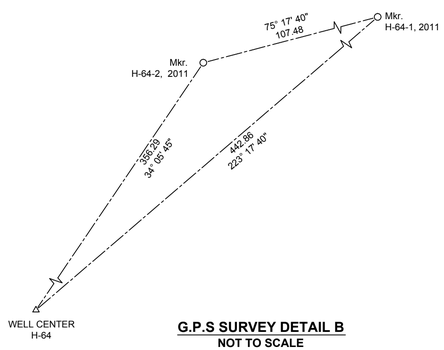




BEARING AND DISTANCES ARE UTM NAD 27, ZONE 9.

GRID AREA 65° 00', 126° 00'
SCALE : 1 : 100 000





G.P.S SURVEY DETAIL B
NOT TO SCALE

-BEARINGS ARE UTM NAD27, ZONE 9.
-DISTANCES ARE REDUCED TO THE HORIZONTAL AT GENERAL GROUND LEVEL.

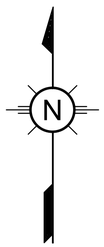


TABLE OF CO-ORDINATES

STATION	U.T.M. ZONE 9, C.M. 129 (NAD83)		UT.M. ZONE 9, C.M. 129 (NAD27)		GEOGRAPHIC CO-ORDINATES (NAD27)	
	NORTHING	EASTING	NORTHING	EASTING	LATITUDE	LONGITUDE
SURVEYED CO-ORDINATES - Derived Using NRCAN PPP Website						
H-64-1, 2011	7199618.85	633281.48	7199419.80	633372.10		
H-64-2, 2011	7199591.56	633177.54	7199392.52	633268.16		
GRID AREA						
N.E.			7211618.36	641434.31	65°00′00″	126°00′00″
N.W.			7211082.18	629654.20	65°00′00″	126°15′00″
S.E.			7193059.69	642315.20	64°50′00″	126°00′00″
S.W.			7192520.91	630461.68	64°50′00″	126°15′00″
H-64 N.E.			7199151.82	633136.02	64°53′30.14″	126°11′15.01″
H-64 N.W.			7199135.02	632766.40	64°53′30.13″	126°11′43.13″
H-64 S.E.			7198687.81	633156.67	64°53′15.14″	126°11′15.00″
H-64 S.W.			7198671.00	632786.99	64°53′15.13″	126°11′43.13″
WELL CENTRE						
H-64	7199296.55	632977.85	7199097.54	633068.47	64°53′28.49″	126°11′20.32″

CANADA LANDS SURVEYS RECORDS
Date: _____ ,20___

PLAN AND FIELD NOTES
OF SURVEY OF

EXPLORATORY WELL

HUSKY LITTLE BEAR H-64
IN UNIT H, SECTION 64
GRID AREA 65° 00', 126° 00'

EXPLORATION LICENSE 462

NORTHWEST TERRITORIES
CANADA OIL AND GAS LAND REGULATIONS

100 50 0 100 200 metres
SCALE 1 : 5000

SURVEYED FOR
HUSKY OIL OPERATIONS LIMITED
BY: R. ROBINSON, C.L.S.
2012

-NAD 83 UTM COORDINATES ARE COMPUTED FOR ZONE 9, CENTRAL MERIDIAN 129°W. BEARINGS WERE DERIVED FROM GPS OBSERVATIONS.
-DISTANCES ARE EXPRESSED IN METRES AND DECIMALS THEREOF.
-DISTANCES SHOWN IN G.P.S. TRAVERSE ARE MEASURED DISTANCES REDUCED TO THE HORIZONTAL AT GENERAL GROUND LEVEL UNLESS SHOWN OTHERWISE.
-FOR THE COMPUTATION OF COORDINATES MEASURED DISTANCES HAVE BEEN REDUCED TO THE UTM PLANE BY MULTIPLYING THEM BY AN AVERAGE COMBINED SCALE FACTOR OF 0.999790.
-NAD 83 UTM COORDINATES ARE CONVERTED TO NAD 27 USING NATIONAL TRANSFORMATION VERSION 2.

-DISTANCES SHOWN ON GRID AREA SUBDIVISIONS ARE UTM PLANE.

C.L.S. 77 TYPE MONUMENTS FOUND. . . . . ●
C.L.S. 77 TYPE MONUMENTS PLACED. . . . . ○
TEMPORARY TRAVERSE POINTS SHOWN THUS (SPIKE 8") . . . . . △

Certified Correct and completed on the 4th day of April, 2012.

RON ROBINSON C.L.S.
April 4, 2012

ASSOCIATION OF CANADA LANDS SURVEYORS
Ron Robinson
Comm. No. 1613
ASSOCIATION DES ARPENTEURS DES TERRES DU CANADA

GROUND ELEVATION AT WELL CENTRE IS **178.50 metres.**
ELEVATIONS WERE DERIVED FROM GPS OBSERVATIONS.

THIS SURVEY WAS EXECUTED DURING THE PERIOD
SEPTEMBER 10th 20011 TO SEPTEMBER 14th 2011, BY RON ROBINSON, C.L.S.

HUSKY OIL OPERATIONS LIMITED

(SIGNATURE, TITLE) . . . . . .

(SIGNATURE) . . . . . .

. . . . . .
WITNESS

. . . . . .
DATE

DRAWN : LBC
DATE : APRIL 4 / 2012
ACAD NO. : 36657WS_H-64

CHALLENGER GEOMATICS LTD.
300–6940 FISHER ROAD S.E.
CALGARY, ALBERTA T2H 0W3
PH (403) 253–8101
WWW.CHALLENGERGEOMATICS.COM
Email: calgary@challgeo.com

File:
Item: 2012-

Examined: _____
Date:

Reviewed: _____
Date:

E.6 DRILLING WASTE DISPOSAL REPORT

SUMMARY REPORT

HUSKY LITTLE BEAR 300-H-64-6500-126-300

SLATER RIVER, NORTHWEST TERRITORIES

Prepared for:

Husky Energy

707, 7th Ave SW
Calgary, AB T2P 3G7

Prepared by:

Marquis Alliance Energy Group Inc.
1800, 800 – 6th Ave SW
Calgary, AB T2P 3G3

TABLE OF CONTENTS

LIST OF APPENDICES – Available Upon Request

1. 0 BACKGROUND INFORMATION

Marquis Alliance Energy Group Inc. (Marquis Alliance) was contracted by Husky Oil Operations Ltd. (Husky) to supervise the Husky Slater River waste management and spill response / support to all operations. Marquis Alliance was on location for the duration of the drilling operations which occurred from February 18 to March 19, 2012, to ensure that drilling waste, and other wastes associated with Little Bear H-64 was disposed using the terms and conditions as outlined in Husky's Northwest Territories drilling waste management plan submitted prior to the start of the project.

2.0 ENVIRONMENTAL CONDITIONS

The general environmental conditions of the lease were monitored throughout the project by the onsite Marquis Alliance representatives. Site inspections were conducted daily on the lease location, water sources, camp sites and fueling stations. Any spills or concerns were addressed immediately upon discovery, and general housekeeping was kept up hourly to ensure no accidental releases were encountered. A high standard was maintained at all times for the overall environmental condition of the project. After drilling operations, the entire lease was scraped by a hoe and the top layer was sent to the CCS Rainbow Lake Landfill / TRD for disposal. A visual inspection then confirmed that no drilling waste or other contaminants remained onsite once the project was completed.

Ice Management

The accumulation of ice on the site was maintained by applying anti-freeze to the steam lines, which greatly reduced the amount of ice buildup on the rig. When ice did manage to accumulate on the equipment, tools were used to remove the ice and then it was shoveled into the evaporator onsite.

Weather Delays

The rig did not experience any delays during the drilling operations of the H-64 well.

3.0 ENVIRONMENTAL PROTECTION MATTERS

The environmental protection used for this project was outlined in Husky's Northwest Territories environmental protection plan and drilling waste management plan.

Spills

There were two reportable spills that occurred during the drilling operations of the H-64 well, both of which were addressed immediately. The first release was a tank farm spill of invert drilling fluids which occurred on February 20, 2012 (Appendix D). Approximately 10m3 of invert fluids were released into the environment but contained in a lined area. The fluids were recovered and returned back into the invert system, and the remaining liner was disposed of during lease clean-up under the invert landfill approval at the CCS Rainbow Lake Landfill.

A second release occurred on February 21, 2012 from an evaporator spill of gel/chem fluids (Appendix E). Approximately 250L of gel/chem fluids were released onto lease surface to the northeast of the evaporator. The impacted area was cleaned up immediately and all impacted surface ice was placed into the evaporator for disposal. The spill contingency plans were available in the Emergency Response Plan.

Sewage and Domestic Waste Water Discharge

A small construction camp was set up at the start of operations to house a maximum of 50 personnel. The camp was then moved and was increased to a total of 135 personnel at peak times for all operations. Two Waste Water Treatment plants were utilized to handle the volumes of waste generated from the camps that were capable of handling up to 150 personnel. The raw municipal sewage generated at the camp operations was collected in a series of smaller sized sewage lift stations equipped with automated, redundant level switches and pumps. When the sewage was generated it was immediately pumped to the Waste Water Treatment Plant (WWTP) in flexible hoses equipped with both insulation and heat trace to ensure that the transfer lines did not freeze in the cold climate conditions. All sewage generated was first collected and then pumped directly to the WWTP for treatment and to an eventual designated discharge field. Discharge fluids were sampled by Banner Environmental Engineering Consulting Ltd and analyzed by ALS Labs. All effluent discharged to the environment met the criteria set by the Sahtu Land and Water Board in Licence Number S11L3-002. The remaining sewage sludge and remaining sewage waste at the end of the project, was disposed of, at the facilities run by the Town of Norman Wells

4.0 REDUCTION MEASURES

Meetings were held daily for the onsite workers, where all the safety concerns were addressed. All staff workers were updated with proper measures to prevent spills, and the procedures to follow in the event of a spill. In addition, a senior environmental advisor provided direction and guidance to the program through the field environmental advisor. The field environmental advisor was knowledgeable in the handling of wastes / spill response, as well as the waste regulations for the Northwest Territories, British Columbia, and Alberta.

Spills

Loads of sawdust were transported to the lease by sealed end dump trucks, which would first drop off fresh sawdust and then fill up with solid drilling waste prior to leaving the site. Garbage pails and spill kits were placed in close proximity to the rig and the rig shaker along with bags of sawdust. The easy access to this equipment improved the efficiency and reduced the environmental impacts associated with this project.

There were also spill kits that had been placed in close proximity to the mud products, inside the vacuum trucks, and next to the tank farms, fueling stations, and transfer stations. In the event of a spill, ease of access to the spill kits could aid in containing the release to a much smaller area.

High-density polyethylene (HDPE) liners were used on the H-64 location. This liner was placed underneath the rig, and the cuttings mixing area, in order to reduce the impacts of any potential spills / leaks. In addition, a secondary containment liner and synthetic berms were placed around the tank farm to contain any leaks or spills. Also, the mud product drums were placed in the onsite cement rings which acted as a secondary containment area in the event of leaks or spills.

TDG Information / Waste Handling

All parties involved in the disposal of hazardous wastes, the Generator, the Carrier, and the Receiver were registered and provided with the appropriate registration number prior to handling hazardous waste, and thereby complying with the Transportation of Dangerous Goods (TDG) regulations. The waste manifests that were completed by the Generator, Carrier, and Receiver, accompanied the shipments of hazardous waste. The information provided on the

manifests, as well as other TDG requirements (i.e.: labeling and placarding) were intended to assist first responders (police, ambulance, fire fighters) with hazard information should a transportation accident occur.

Husky created a Waste Management Table/Poster that was posted at the operations site to help the field staff determine how wastes were to be managed. The onsite Environmental Technician was responsible in ensuring that all wastes were managed accordingly. This Waste Management Table can be found in Husky's Northwest Territories drilling waste management plan.

5.0 WASTE PRODUCTION OVERVIEW

Incineration

Incineration was one means of reducing the mass and volume of waste used. There were two incinerators used: one remained at the camp, while the other was used on the drilling sites. There was 1830 kg of waste from the camp, and 784 kg from the H-64 lease (Appendix C). The amount of ash that was produced from this incineration was 3.5m^3 from the camp waste and 1.5m^3 from the lease H-64. This ash was disposed of by Ketek Group in Fort Nelson.

Domestic Waste

Domestic waste that was unsuitable to be incinerated was hauled to the Norman Wells transfer station by Hodgsons Contracting Inc. In total 150m^3 of domestic waste was hauled offsite. One full 30m^3 container of recyclables was hauled to the local Norman Wells School for fundraising purposes.

Evaporation

Evaporation was another method used to reduce the quantity of waste, by evaporating the fluids within the waste, such as ice and snow. This was most useful when the drilling waste was scraped up along with the surrounding snow and ice during cleanup operations. There was 36 m^3 of waste that was evaporated from the H-64 lease.

Water-Based Drilling Fluids and Cutting

A water-based drilling fluid system was used for drilling the surface hole on the H-64 location. The waste streams generated included used water-based drilling fluids and drill cuttings and fines. The solid waste, including rock cuttings and centrifuged fines or sludge, were transferred to the onsite mixing bins where they were mixed with sawdust using the onsite loader, and prepared for transport. Prior to stabilization, the raw waste was sampled and analyzed at ALS Laboratory in Edmonton, a 3rd party laboratory, for landfill acceptance characterization. The stabilized waste was then transported by sealed and tarped end-dump truck trailers to the CCS Class II Oilfield Waste Landfill Facility located in Rainbow Lake, Alberta (Alberta Environmental Approval # 193262-00-00). Recovered water-based drilling fluids were centrifuged to extract water. The water was then evaporated and the remaining solids were hauled to the CCS Rainbow Lake Landfill. The waste was hauled with proper documentation (NWT Movement Documents).

A total of 83.45 tonnes of the surface hole drill cuttings from H-64 were hauled to the CCS Rainbow Lake Landfill for disposal. Water-based drilling waste fluids that were not suitable for re-use were removed for disposal at either the Newalta Treatment, Recovery, and Disposal (TRD) facility in Fort St. John, B.C. (LSD 15-05-083-17W6M), or the CCS Rainbow Lake TRD (LSD 12-24-085-19 W5M). A total of 56 m^3 of fluids from H-64 went to the Newalta TRD, while 50 m^3 of fluids went to the CCS Rainbow Lake TRD facility (Appendix B).

Mineral-Oil Based Drilling Fluids and Cuttings

The intermediate / main hole was drilled with a mineral-oil based drilling fluid system (invert). The waste stream included the rock cuttings and fines contaminated with invert. This solid waste was separated from the drilling fluids using the rig shakers and centrifuges. They were then transferred to the onsite mixing bins where they were mixed with a stabilizing agent (sawdust) using the onsite loader, and prepared for transport. Prior to stabilization the raw waste was sampled and analyzed at ALS Laboratory in Edmonton, a 3rd party laboratory, for landfill acceptance characterization. The stabilized waste was then transported by sealed and tarped end-dump trucks to the CCS Class II Oilfield Waste Landfill Facility located in Rainbow Lake, Alberta (Alberta Environmental Approval # 193262-00-00). The waste was hauled with the proper documentation (NWT Movement Documents).

A total of 142 tonnes of mineral-oil based cuttings from H-64 were hauled to the CCS Rainbow Lake Landfill for disposal (Appendix C). Upon completion of the drilling program, the mineral oil

was trucked back to Fort Nelson, British Columbia, for reconditioning to be recycled and re-used by the mud company.

Cement Returns

Cement returns were stored within the onsite lined cement rings to harden, prior to being transported by sealed and tarp end-dump truck trailers to the CCS Class II Oilfield Waste Landfill Facility located in Rainbow Lake, Alberta (Alberta Environmental Approval # 193262-00-00). There were a total of 8.22 tonnes of cement returns from H-64, hauled with the drilling waste using the proper NWT Movement Documents, to the CCS Rainbow Lake Landfill. A summary of the drilling waste disposal volumes can be found in Table 1, below.

Table 1: H-64 Little Bear Daily Waste Tracking

Waste Type	Disposal Area	Volume	Units
Gel/chem Fluids	Newalta TRD	56	m^3
Gel/chem Fluids	CCS Rainbow Lake TRD	50	m^3
Gel/chem Solids	CCS Rainbow Lake Landfill	83.45	tonnes
Invert Solids	CCS Rainbow Lake Landfill	142	tonnes
Cement	CCS Rainbow Lake Landfill	8.22	tonnes
Lease cleanup	CCS Rainbow Lake TRD	43	m^3
Lease cleanup	Newalta TRD	25	m^3
Lease cleanup	CCS Rainbow Lake Landfill	117.03	tonnes

Sewage and Domestic Waste Water

There were two camp operations used for this project. The initial construction group entered the area first and provided the necessary infrastructure for the drilling and seismic operations that followed. The camp peaked at a 135 person camp which housed the construction, drilling, seismic, and camp operational personnel. Hence, two sewage plants were used with the following stated capacities:

- Initial Construction Camp, Stated Capacity of 50 persons
- Combined Camps, Stated Maximum Capacity of 135 persons

Four main waste streams resulted from the wastewater and potable water operations for this project. These streams are listed below:

- Raw municipal sewage generated from camp operations
- Treated municipal wastewater effluent after treatment in the Wastewater Treatment Plant (WWTP)
- Residual sludge generated during treatment in the WWTP
- Backwash wastewater generated at the potable water plant

An engineered drawing for the effluent disposal field was created for a 200 man camp. Husky used this setup for a 50 man camp except the initial system was reduced in size being compromised of two 125 foot effluent discharge legs initially. Once the full operation began and road access to the main camp was provided, the effluent field was converted into a typical Type A 200 man discharge field. This field design proved to be very effective at dispersing the final treated effluent and allowed for the most beneficial uptake of these treated effluent waters by the natural environment. The 50 man WWTP had a total of 309.60 m^3 of treated effluent that was discharged in the disposal field, while the 100 man WWTP produced 430.00 m^3 of treated effluent that was discharged into the discharge field.

Residual sludge generated onsite occurred within the Membrane Bioreactor system as it is the natural byproduct of the WWTP processes. The eventual accumulation of sludge was impossible to avoid as these materials represent the inorganic fractions of the raw sewage and/or the organic fractions of the biomass highly resistant to aerobic decomposition. Also, at the end of the project as the camp facilities were being demobilized, the treatment plants needed to be emptied. These residuals required final treatment and management at longer term facilities, and a total of 96 m^3 of waste from the 50 man WWTP and 73 m^3 of waste from the 100 man WWTP were vacuumed out and transferred to an approved facility in Norman Wells for longer term treatment/management. These volumes were relatively small and represented only a very small fraction of the total volume of raw sewage generated and/or treated effluent disposed. Both the raw sewage and treated effluent flows were measured and recorded on site and any trucked residuals or bypasses were also recorded with the logs to ensure an accurate record of the sewage, effluent and residuals were maintained.

The last waste stream represents the backwash water from the potable water plant. Given the nature of the potable water plant and its pre-treatment cartridge filters, the backwash water was expected to be free of contaminants. There was 42.32 m^3 of backwash water from the 50 man WWTP and 60.80 m^3 of backwash water from the 100 man WWTP, for a total of 103.12 m^3

of backwash water produced in this project. Since current potable water standards do not permit the recycle of these backwash waters within the potable water plant itself, this waste stream was ran through the WWTP, and discharged to the surrounding environment.

Lease cleanup

After drilling operations were completed and the rig moved offsite, the lease cleanup process began. All lease cleanup material was loaded into trucks and hauled to the appropriate facility. There was 43 m^3 of lease cleanup from H-64 that was disposed at the CCS Rainbow Lake TRD, 25 m^3 was disposed at the Newalta TRD, and 117.03 tonnes of lease cleanup from H-64 were disposed at the CCS Rainbow Lake Landfill.

This lease cleanup material included:
-liner, that had been cut into manageable pieces
-the top layer of snow on the lease that had been scraped, thereby removing any contaminated snow and ice
-any fresh water based or mineral-oil based drill cuttings and fluids that remained onsite in the mixing bins
-the remaining waste stored within the cement rings

6.0 ENVIRONMENTAL CONTINGENCY PLAN EXCERCISES

There were multiple environmental contingencies put in place for this project to be certain that all necessary compliances were met:

-Safety meetings were conducted every 12 hours by a Marquis Alliance representative
-Spill kits were placed in close proximity to all potential spill sources
-Sawdust was onsite and readily available
-Liners were used under tank farms and evaporators
-Waste was tracked daily
-A senior technician with spill response training was onsite at all times
-All parties involved in the project were given daily status updates

7.0 CONCLUSION

Over the duration of the project, all of the drilling and domestic wastes associated with Little Bear H-64 well, was disposed using the methodology outlined in Husky's Northwest Territories drilling waste management plan, and terms and conditions set out by the Sahtu Land and Water Board. After drilling operations were completed, all the equipment was removed from location and the lease was inspected for releases and scraped clean. There were no major spills identified during drilling operations of this well, and Husky Energy was satisfied with the outcome of this project.

E.7 NEB LICENSE & INSPECTION REPORTS

National Energy Board | Office national de l'énergie

NATIONAL ENERGY BOARD
Exploration and Production
OCT 27 2011

OPERATIONS AUTHORIZATION

APPLICATION

HUSKY OIL OPERATIONS LTD

(Name of Operator)

Hereby applies for authorization of a proposed:

☒ Drilling Program ☐ Production Program ☐ Installation/Removal Program ☐ Other
Please Specify:

under paragraph 5(1)(b) of the *Canada Oil and Gas Operations Act (R.S.C., 1985, c. O-7) and* Part 2 of the *Canada Oil and Gas Drilling and Production Regulations* (SOR/2009-0315) using equipment and procedures described in the application .

Changes in equipment or procedures, outside the scope of this application, require the approval of the Board in order that this authorization remains valid. An approved copy of this notice is to be posted at each work site and is subject to the terms and conditions attached to this authorization.

Licence No. Select EL462 and EL463 NEB Operating Licence No. 1204

Region NWT Mainland

Field SLATER RIVER

Anticipated date of commencement DECEMBER 2011 Proposed Duration 4 months

Scope of Work Construction of winter access road, campsite and 2 well sites locations
Drilling and evaluation (core and log) of 2 exploration wells, Little Bear N-9 and Little Bear H-64 in Slater River area of NWT

"I certify that the information provided on this form is true and correct"

Name Brad Allison Telephone (403) 750-1515 Ext

Job Designation Vice President Exploration E-Mail brad.allison@huskyenergy.com

Signature Brad Allison Date oct 24, 2011

Responsible Officer of Company

NATIONAL ENERGY BOARD AUTHORIZATION

(Board Use Only)

The operator named above is hereby authorized under paragraph 5(1)(b) of the *Canada Oil and Gas Operations Act (R.S.C., 1985, c. O-7)* and is subject to the terms and conditions attached to this authorization.

Job Designation Chief Conservation Officer

Signature J. Wyatt Date 22 Dec 2011

NEB Authority

Operation Authorization (OA) No. OA-1204-002 Expiry Date 31 December 2012

Canada

National Energy Board | Office national de l'énergie

APPROVAL TO DRILL A WELL

APPLICATION

This application is submitted under Section 10 of the *Canada Oil and Gas Drilling and Production Regulations* (SOR/2009-0315). When granted under Section 13 of the Regulations, this form is the requisite approval for the commencement of well operations. An approved copy of this notice is to be posted at each drill site.

Well Name	Little Bear H-64	Operator	Husky Oil Operations Limited
Well Type	Exploratory Well	If Other Type, please specify	
NEB Operating Licence No.	1204	Operations Authorization No.	
Drilling Rig or Unit	Nabors 23	Contractor	
Licence No.	Exploration Licence 462	Estimated Well Cost	$18,800,000
Station Keeping	Not Applicable	Land Structure	Conventional Land
Land Use Permit No.		Issued by:	Sahtu Land and Water Board
Water Licence No.		Issued by:	Sahtu Land and Water Board
Location Unit	H	Section 64	Grid
Coordinates (NAD 27)	*Surface*	Lat 64 ° 53 ' 28.5 "	Long 126 ° 11 ' 20.3 "
	Bottom Hole	Lat 64 ° 53 ' 28.5 "	Long 126 ° 11 ' 20.3 "
Region	NWT Mainland		
Target Formation	Canol / Hume	Field/Pool	Slater River /
Well Path	Vertical	Discovery Well	
Elevation KB/RT	183.5 m	Ground Level / Seafloor	178.5 m
Approximate Spud Date	20 February 2012	Est. Days on Location	25 days
Anticipated Total Depth	1412 m KB		

EVALUATION PROGRAM

Sample Type	Top to Bottom Interval (m KB)	Sample Interval (m)	Comments
Drill Cuttings	surface-1412	5.0	NEB: 2 vial sets and 1 bag set 500g minimum.
Drill Cuttings	Surface-819	5.0	GSC Bagged samples to base of Cretaceous (819m TVD)
Conventional Cores	1220-1370	Other	Cut core in Lower Canol, Hare Indian and Bluefish formation
Logs and Tests	650-1412	Other	CNL-LDT-GR, Sonic,Array Induction&GR /CNL across surface csg
Logs and Tests	1150-1412	Other	ECS, Sonic Scanner, NMR

CASING PROGRAM

O.D. (mm)	Weight (kg/m)	Grade	Setting Depth (m KB)
508	Conductor Pipe	ASTM A 53	+/-30
244.5	53.6	J-55	630
177.8	34.2	L-80	1412

Additional Information

"I certify that the information provided on this form is true and correct"

Name	*Kim Richardson*	Telephone	(403)-298-7273
Job Designation	Drilling Superintendent	E-Mail	kim.richardson@huskyenergy.com
Operator	Husky Oil Operations Limited		
Signature	Kim Richardson	Date	15 November, 2011

Responsible Officer of Company

NATIONAL ENERGY BOARD APPROVAL

(Board Use Only)

This well approval is granted under section 13 of the *Canada Oil and Gas Drilling and Production Regulations* (SOR/2009-0315) and is subject to the terms and conditions attached to this approval and Operations Authorization No. OA-1204-002.

Job Designation	Chief Conservation Officer	Well Identifier	2077	Unique Well Identifier	300H645001260000
Signature	J Mayo	Date	22 Dec 2011		

NEB Authority

NATIONAL ENERGY BOARD
Exploration and Production
NOV 16 2011

Canada

National Energy Board | Office national de l'énergie

Inspection Summary / Résumé de l'inspection

Canada Oil and Gas Operations Act	
☐ Canada Oil and Gas Operations Regulations	☒ Canada Oil and Gas Drilling and Production Regulations
☐ Canada Oil and Gas Certificate Of Fitness Regulations	☐ Canada Oil and Gas Geophysical Operations Regulations
☐ Canada Oil and Gas Installations Regulations	
Canada Labour Code, Part II	
☒ Oil and Gas Occupational Safety and Health Regulations	

COMPANY / SOCIÉTÉ
HUSKY OIL OPERATIONS LIMITED

LOCATION / EMPLACEMENT
Husky Little Bear H-64

FACILITY / INSTALLATION
Nabors Drilling Rig 23

DATE OF INSPECTION / DATE DE L'INSPECTION
FEB 29 – MARCH 1, 2012

COMPANY REPRESENTATIVE / REPRÉSENTANT(E) DE LA SOCIÉTÉ	Goly Zilabi – Sr Drilling Engineer *PRINT (NAME, TITLE) / EN MAJUSCULE (NOM, TITRE)* *SIGNATURE*	PHONE / TÉLÉPHONE 1-403-513-7586 FAX / FACSIMILÉ March 1, 2012 Date
COGOA INSPECTORS / INSPECTEUR DE L'ONÉ	Rick Turner and Lori Croal *(PRINT / EN MAJUSCULE)* *SIGNATURE*	PHONE / TÉLÉPHONE 403-540-3754 403-519-9889 FAX / FACSIMILÉ (403) 292-5876 March 1, 2012 Date

File Number: 1112-318

Document1

Canada

REMARKS / COMMENTAIRES:

Scope:

Safety inspection of the Husky Little Bear H-64 well operations and to ensure all deficiencies noted from first inspection on N-09 have been rectified and program is being conducted according to the approved program, and applicable regulations.

Rig Safety General:

- Recording and posting of information (Satisfactory).
- Electrical equipment (Satisfactory).
- Accumulator at required distance from well and in good condition (Satisfactory).
- Boilers have been inspected at the proper intervals (Satisfactory).
- All safety equipment associated with engines (Satisfactory).
- Each work area has two exits (Satisfactory).
- Adequate lighting provided for each work area (Satisfactory).
- Sour service equipment meets requirements (Satisfactory). Pump lines properly secured (Satisfactory).
- Drillers BOP controls properly marked (Satisfactory).
- Wind indicators (Satisfactory).
- General house keeping (Satisfactory).

Personnel Safety:

- Personnel has valid first aid, CPR, WHMIS, TDG, and BOP tickets (Satisfactory).
- Adequate first aid equipment and facilities (Satisfactory).
- Safety meetings documented (Satisfactory).
- Respiratory protective systems (Satisfactory).
- Escape line located at the monkey board and properly installed (Satisfactory).
- Elimination of potential hazardous conditions (Satisfactory).
- Required personnel safety equipment provided (Satisfactory).
- Gas detection equipment adequate and properly maintained (Satisfactory).
- Adequate communication equipment in place (Satisfactory).
- Adequate signage (Satisfactory).
- Adequate contingency plans, equipment and supplies (Satisfactory).

REMARKS / COMMENTAIRES:

Derrick/Rig Floor/ Substructure Safety:

- Rig mast properly inspected (Satisfactory).
- Substructure is in satisfactory condition with no visible damage (Satisfactory).
- Derrick name plate attached (Satisfactory).
- Drilling line in good condition (Satisfactory).
- Draw works in good condition (Satisfactory).
- Crown saver installed and in good operating condition (Satisfactory).
- Weight indicator installed and in good operating condition (Satisfactory).
- Tongs and slips in good condition (Satisfactory).
- Safety cables attached to tongs, weight indicator, Kelly hose, and mud pump lines (Satisfactory).
- Braking system in satisfactory condition (Satisfactory).

Blow-out Prevention Equipment - Safety:

- BOP stack shop serviced every three years (Satisfactory).
- BOP pressure rating and testing of system adequate (Satisfactory).
- Configuration of BOP stack complete (Satisfactory).
- BOP controls and accumulator are adequate and in good condition (Satisfactory).
- BOP function tests and results have been recorded (Satisfactory).
- BOP drills conducted and recorded (Satisfactory).
- Up to date kill sheet posted in the dog house shack (Satisfactory).
- BOP stack, choke, kill lines and manifold properly winterised (Satisfactory).
- Upper and lower Kelly cocks installed and key available (Satisfactory).
- Stabbing valves and cross overs available (Satisfactory). All flow lines, choke and kill lines properly installed and secured (Satisfactory).
- No valves down stream of manifold (Satisfactory).
- Flare tank adequate and at the proper distance from the well (Satisfactory).
- Trip sheets fully filled out (Satisfactory).
- Hole fill volumes available to the driller and hole is either filled every 5 stands or continuously (Satisfactory).
- Pop off valves have proper shear pins (Satisfactory).
- Pason (PVT) system works properly (Satisfactory). Crew properly trained and can run the BOP equipment (Satisfactory).
- Accumulator at required distance from well and in good condition (Satisfactory).

REMARKS / COMMENTAIRES:

Camp Safety:

- Fire and gas detectors installed and operable (Satisfactory).
- Fire extinguishers installed and checked every month (Satisfactory).
- Fire alarm systems operable (Satisfactory).
- Fire drills conducted (Satisfactory).
- Egress, window shutter are to be open during camp occupation (Satisfactory).
- General cleanliness (Satisfactory).
- Potable water available (Satisfactory).
- Accommodations meet requirements (Satisfactory).

Inspection Summary:

SAFETY:

NEB COGOA Safety inspectors checked in at Husky's security shack where they were met by security and drug dogs and handlers. Husky Slater access road is radio controlled and kms are marked very well including speed posting. NEB COGOA Safety inspectors observed that visitors/personnel utilizing the Husky access road were utilizing the radios diligently.

NEB COGOA Safety inspectors were met at main camp by Goly Zilabi and Husky Safety Representative Stuart Gardner. Stuart gave NEB COGOA Safety inspectors a full blown (3 year valid) orientation for Husky site. Excellent thorough orientation and assistance by all personnel.

NEB COGOA Safety inspectors went to Husky Little Bear H-64 to complete rig inspection. NEB COGOA Safety inspectors checked in to site with Wellsite Consultant Cal Conklin. Cal gave NEB COGOA Safety inspectors site specific/hazards for H-64 site. NEB COGOA Safety inspectors met with onsite medic and verified her credentials as an EMT. Safety inspectors discussed with medic process for having the MTC warm and check to see how often the vehicle is started. We identified that having only one set of keys for emergency vehicles is potentially a concern. Medic confirmed with Goly that she was sent out with two sets of keys but cannot find second set currently. Goly has Frontier sending second set of keys. Goly will advise NEB COGOA Safety inspectors when they have arrived on site for medic.

NEB COGOA Safety inspectors observed from inspection on N-09 that the only concern from rig personnel was that communications were very weak for corresponding via telephone for personal calls. Immediately after our departure on last inspection Goly had communications rectified and all personnel have communication now.

NEB COGOA Safety inspectors observed that the "check in check out" system at security shack seems to be very positive and efficient.

NEB COGOA Safety inspectors along with Goly had spill kit placed where mud products were sitting in middle of area near rig. There was concern that barrels with versa coat were punctured that Husky did not have secondary containment in place for these barrels other than the liner on the ground. Versa Coat is a oil mud product that is contained in sealed metal barrels. It was discussed that a secondary containment (berm) would be more of a hazard due to tripping hazards or slipping as the

REMARKS / COMMENTAIRES:

barrels get moved up to mud tank area. NEB COGOA Safety inspectors were satisfied with a spill kit being placed in position for immediate clean up if spill occurred. The mud product (Versa Coat) was of a high viscosity, in a well travelled accessible area the spread of a spill would be limited along with the lease is protected with a environmental plastic base liner.

NEB COGOA Safety inspectors were at camp site when Husky had approximately 25 students out to tour project area. The school students were from grade 9 - 12. NEB COGOA Safety inspectors attended the discussion in the recreation area where Chris Salowich (environmentalist) and Goly Zilabi (Drilling Superintendent) were conducting a talk to the students. At this time Husky representatives introduced NEB COGOA Safety inspectors and asked inspectors to speak to the students unexpectedly. COGOA Safety inspectors were very pleased with this opportunity as inspectors wanted students to be aware of what the role of NEB is and what the students opportunities hold for their futures. It was noted after NEB COGOA Safety inspectors departed the meeting that Husky had further discussions regarding "women in the industry". This was very pleasing to hear as it opened up great discussions for students. NEB COGOA Safety inspectors would like to commend Husky Energy for its interactions with the students of the North. Excellent and thank you for the opportunity to be involved in the interaction.

Thank you to all personnel that accommodated NEB inspectors and the cooperation from all. It was very much appreciated and a pleasure.

Lori Croal
Safety Officer, Operations Inspector

Rick Turner, Safety Officer
Operations Technical Specialist

Canada

National Energy Board / Office national de l'énergie

Inspection Report / Rapport d'inspection

Canada Oil and Gas Operations Act / Loi sur les opérations pétrolières au Canada	
☒ *Canada Oil and Gas Drilling and Production Regulations / Règlement sur le forage et la production de pétrole et de gaz au Canada*	☐ *Canada Oil and Gas Geophysical Operations Regulations / Règlement sur les études géophysiques liées à la recherche du pétrole et du gaz au Canada*
☐ *Other / Autre*	☐ *Other / Autre*
Canada Labour Code, Part II / Code canadien du travail, Partie II	
☐ *Oil and Gas Occupational Safety and Health Regulation / Règlement sur la sécurité et la santé au travail (pétrole et gaz)*	

COMPANY / SOCIÉTÉ

Husky Oil Operations Ltd.

LOCATION / EMPLACEMENT

Slater River, NWT; Little Bear N-09 and H-64

FACILITY / INSTALLATION

Nabors Drilling Unit Rig 23

Activity # / Activité n° : 1112-319

DATE OF INSPECTION (*DD/MM/YYYY*) / DATE DE L'INSPECTION (*JJ/MM/AAAA*)

28 FEBRUARY 2012

COMPANY REPRESENTATIVE / REPRÉSENTANT(E) DE LA SOCIÉTÉ	Chris Salewich, Environmental Advisor PRINT (NAME, TITLE) / EN MAJUSCULES (NOM, TITRE) SIGNATURE (SIGNATURE INDICATES RECEIPT OF FINAL COPY, NOT NECESSARILY AGREEMENT / LE SIGNATAIRE ACCUSE RÉCEPTION DE LA VERSION DÉFINITIVE DU DOCUMENT SANS NÉCESSAIREMENT ÊTRE EN ACCORD AVEC SON CONTENU)	403-700-4780 PHONE / TÉLÉPHONE chris.salewich@huskyenergy.com Email 02 March 2012 DATE
CONSERVATION OFFICER / LE DÉLÉGUÉ À L'EXPLOITATION	John Korec/Don Logan PRINT / EN MAJUSCULES SIGNATURE	403-292-6614/403-299-3676 PHONE / TÉLÉPHONE (403) 292-5503 FAX 02 March 2012 DATE

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REMARKS / COMMENTAIRES :

Husky Slater River drilling program is located southeast of Norman Wells, NWT and west of Tulita, NWT. The purpose of this NEB inspection was to observe drilling operations and to verify compliance with the Environmental Protection Plan (EPP) and Operations Authorization conditions.

28 February 2012

NEB Environmental Specialists attended the site-specific safety and environmental orientation facilitated by Stuart Gartner, safety. Highlights included:

- Company safety commitments
- Company environmental commitments
- Hazard assessments
- Task specific assessments

Following the orientation, NEB staff conducted an opening meeting where they indicated an interest in observing or discussing:

- Well sites N-09 and H-64
- Duties of environment and wildlife monitors
- Mitigation measures identified in EPP
- Handling and use of waste and chemical substances
- Recent 10 m^3 spill of invert mud (83% mineral oil) at H-64
- Water use

During the meeting spill reporting criteria and follow-up agency jurisdiction was also discussed. Husky staff Chris Salewich, Cal Conklin (Rig Supervisor), Stuart Gartner (Safety), and Darren Brown (Construction Supervisor) were in attendance. An HSE representative attended during the facility inspection to verify acceptable atmosphere prior to any NEB photos being taken.

Well site Little Bear N-09

NEB staff proceeded to N-09 where drilling activities were recently concluded. The wellhead, drilling pad, and remaining spoil piles were observed. There were no visible signs of contamination although one remaining piece of synthetic liner was observed in the NE corner of the site. Husky staff explained that the top 2 inches of the ice pad had been scrapped off and treated as contaminated before being shipped off-site for disposal. Spoil piles will be mulched and spread over the site once seismic operations in the area are completed. Any remaining synthetic liner will be collected and disposed.

Well site Little Bear H-64

At H-64, NEB staff observed: the drilling operations mud system, included the shakers; slop tank; large capacity tank storage; centrifuge; and mixing bins where sawdust is added to wet cuttings for stabilization prior to transport for off-site disposal. Husky staff pointed out the synthetic liner which underlies the entire drill site, barring spills from reaching the ice pad. On 20 February 2012, a spill of 10 m^3 of mineral oil-based

REMARKS / COMMENTAIRES :

drilling fluid had overflowed a storage tank at the mud system tank farm. The spill was entirely contained within the synthetic-lined tank farm's secondary containment. Husky staff stated that spill was a result of human error outside normal operating practices. Additional follow-up will be conducted by NEB staff for this spill as it is a separate incident outside of this inspection.

NEB staff then observed the cement storage bins, evaporators, incinerators and enviro bin. No issues were noted. However, a pallet with drums of a marked toxic mud additive was observed to be without secondary containment. . Husky staff stated that they would store the barrels within the mud system's tank farm's secondary storage. On 1 March, Rick Turner and Lori Croal, NEB Safety Inspectors, confirmed that the barrels were placed into the bermed area.

Husky and NEB staff also discussed the use of environmental monitors onsite, specifically wildlife and waste management monitors. Husky stated that monitors are employed from nearby communities of Norman Wells and Tulita. Husky provides additional training as needed.

- Wildlife monitors travel around the vicinity of the well lease and record all wildlife sightings provide the information and update a map with the sightings back at their camp. Husky staff indicated the data collected would be provided to the GNWT.
- Waste monitors ensure vehicles parked onsite for more than 2hrs have a drip tray under the engine.

Conclusion:
No non-compliances were observed within the scope of this inspection.

NEB staff would like to thank Husky staff for their cooperation and their time during the course of this inspection.

INSPECTOR INITIALS / INITIALES DE L'INSPECTEUR

Canada

REPRESENTATIVE INITIALS / INITIALES DU REPRÉSENTANT

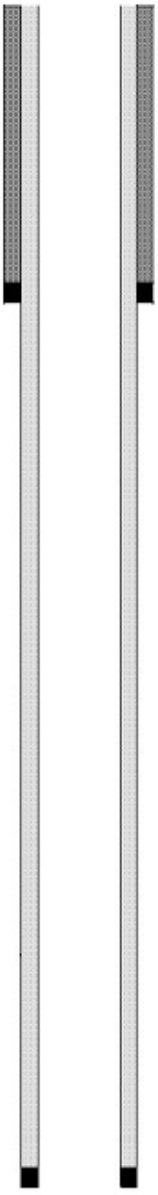
E.8 LITTLE BEAR H-64 PLANNED STICK DIAGRAM

HUSKY OIL OPERATIONS LIMITED - DRILL PLAN SUMMARY

Well Name:	**Little Bear H-64**	**Surface Coordinates:**	64° 53' 28.5"N 126° 11' 20.3"W NAD 27
Well Location:	NWT- Slate River	**Downhole Coordinates:**	(same as above)
Well Type:	Vertical Drill	**Total Depth:**	1412m
		GL elevation:	179m
Primary Target:	Canol	**KB elevation:**	184 m
Secondary Targets:	None	**KB-GL:**	5.0m
		Rig:	Nabors 23
Well Classification:	Wildcat	**D&C Cost Estimate:**	
Drilling Licence:		**Drilling AFE#:**	
Tight Hole Status:	Confidential	**Date:**	October 11, 2011

GL 179 m
KB 184 m

Formation	-m SS	m MD
Little Bear		Surface
Slater River	-215.0	399
Csg Shoe		630
Lower Cretaceous	-465.0	649
Imperial	-635	819
Upper Canol **	-1000	1184
Middle Canol **	-1014	1198
Lower Canol **	-1045	1229
Hare Indian **	-1123	1307
Bluefish **	-1158	1342
Hume	-1178	1362
TD	-1228	1412



ERP: Site Specific ERP required

Conductor Pipe:+/- 30 m 508mm, pressure cemented with Arctic Cement

SURFACE HOLE (0-630m):

Divertor is required for surface hole
Shallow gas drill shall be performed before spud
H2S service Rigged up before drilling

Hole Size : 311mm
Mud: Gel / Chem 1050-1150 kg/m3
Surveys: MWD
Problems: Gravel, boulders, rough drilling, mud rings, losses,
Casing: 244mm, 53.6 kg/m, J55, LTC
Cement: CEMENT:Surflte plus + LCC-1 (100% XS)

DRILLING TIME:	Days:
Pre-spud/ Rig Up	2
Drill Surface Hole	3
Set / Cmt Surface Csg/BOP/ Drill out	3
Drill Main Hole to core point	3
Coring Canol	5
Drill To TD	1
Log Mainhole	2
Wiper Trip/ LD pipe	2
Run&Cmt 177.8mm Csg / WOC	2
Secure Well / Tear-out	2
TOTAL:	25

MAIN HOLE (630-1412 m):

BOP: Class IV
Hole size: 222mm
FLOT Formation Leak off test will be performed
Mud Type: Invert : MW: 1100-1250 kg/m3
Surveys: MWD / GR

Mud Logging Full Spectrum Gas Chromatograph From Surface To TD w/ H2S Detection
Samples: NEB: 5m intervals surface to TD. 2 vial sets and 1 bag set 500g minimum.
Husky: Samples in vials at 5m intervals surface to TD.
GSC: Bagged samples at 5m intervals from surface to base of Cretaceous (819m TVD).

Drilling Hazards

-H2S: No H2S reported on any of the offset wells
-Abnormal Pressure/Kick : No abnormal pressure /kick encountered on any of offset wells
-Losses: Minor losses in formations above Slater River in offset wells cured by LCM
-Mud Weight: Max. MW in offset wells drilled to Hume was 1160 kg/m3
-Pressure: Pressure in the Canol shales is unknown, by analogy to other productive shale horizons in North America, pressure gradients for the Canol, Hare Indian and Bluefish shales are estimated to lie within a range of 11.3 – 15.8 kPa/m.
-Hazards: The wellbore to TD does not cross any fault and there is no seismic evidence to anticipate either shallow or deep drilling hazards.

Coring: Entire Canol, Hare Indian and Bluefish will be cored

Logging: CNL-LDT-GR, Dipole Sonic, and Array Induction over entire well.
2. ECS, Sonic Scanner, NMR from 30m above Upper Canol to TD

Casing: **Surface - 1415m: 177.8mm, 34.2 kg/m, L-80 LTC**

Cement: Lead: LW-1400 + additives (0 - 1000m) 30% excess over caliper
Tail: 0:1:0 'G' + additives (1000 - 1412m) 30% excess over caliper

** Primary Target * Secondary Target

E.9 DAILY DRILLING REPORTS

Daily Drilling - Detail (legal size)

Report Start Date: 2/19/2012
Report #: 3, DFS: 0.52
Depth Progress: 124.00

Well Name: HUSKY LITTLE BEAR H-64

License UWI	Surface Legal Location	License No.	State/Province
300H646500126 00	300H646500126 00	462	N.W.T

Sour Class	ERP Required	Lahee Classification	Business Unit
Sweet	No	TH (C)	Canada Frontier - Exploration

Initial Ground Elevation (m)	Cut/Fill (m)	Ground Elv. (m)	KB Elevation (m)	KB to Gnd (m)
178.00	0.0	178.00	183.20	5.20

KB-Casing Flange Distance (m)	KB-Tubing Head Distance (m)	Total Depth All (TVD) (mKB)
5.47	5.00	Original Hole - 1340.8

Primary Wellbore Affected: Original Hole, 300H646500126 00

Weather	Temperature (°C)	Road Condition	Hole Condition
Overcast	-24	Fair	Good

Operation at Report Time	Operation Next Report Period
Trip for directional BHA	Trip. Drill from 124m

Operation 06:00	Operation Summary
Thaw frozen mud line	Continued to rig up and rig to spud, fill mud tank with water and pre-mix spud mud. Picked up BHA. Held a crew hand-over and a safety meeting. Mixed up kill mud to 1400 kg/m3. Rigged up tank farm and transferred invert mud. Spudded well at 1130 hr and drill 311mm surface hole to 69m. Ran a wireline survey at 57m. (0.1 degree). Drilled ahead from 69m to 97m. Ran a wireline survey at 87.0m (0.0 degree). Continued to drill ahead to 124m. Circulate and trip out to run directional BHA.

Remark: No Accident, Incident or Enviromental Concern. Direction to the location. From Norman Well, Take the winter road south for approx 34.4km. Turn right and go through the security. Continue on the Husky Winter Rd to the Husky Camp Site. Continue on the Husky Winter Rd to km 44 Turn left and continue to km 46. Keep left and go to location at km 47. All road are RADIO CONTROLLED. Tank Farm: Base Oil Delivered today 0m3, Total at Tank Farm 27m3. Invert Delivered today 0m3, Total at Tank Farm 81m3 Daily invert loss: 0.0 m3 Cumulative invert loss: m3

Daily Contacts

Type	Contact Name	Title	Mobile
Office	Kim Richardson	DR Superintendent	403-542-1059
Office	Goly Zilai	DR Eng	403-462-8021
Office	Sandeep Randhawa	DR Eng	403-519-5660
Office	Darren Brown	Construction Super	
Well Site Supervisor	Cal Conklin	DR Field Super	403-502-3387
Well Site Supervisor	Woody Periard	DR Field Super	403-350-6027
Well Site Supervisor	Dan Heidorfer	DR Field Super	780-446-5160
Rig Manager	Troy Pre	Rig Manager	

Time Log

Start Time	Dur (hr)	Cum Dur (hr)	End Time	Activity Code	Activity Desc.	Prob/U...	Problem Time (hr)	Problem Ref	Comment
00:00	6.75	6.75	06:45	1	RIGUP TEARDOWN				RIG UP TO SPUD, FINISH SUB AND TANK TARPING, INSTALL FLOW LINE, ACCUMULATOR LINES TO DIVERTER, FLARE STACK, MIX DRILLING MUD, INSTALL NEW KELLY STRIPPER,
06:45	0.25	7.00	07:00	21	SAFETY MEETING				SAFETY MEETING HELD FOR SHIFT CHANGE W/ BOTH CREWS, R.M. AND OPERATORS REP.
07:00	4.50	11.50	11:30	25					MAKE UP PRE MIX KILL MUD SPOT TANK FARM LAY OUT SWAMP MATTING
11:30	0.50	12.00	12:00	2	DRILL				SPUD WELL DRILL 311MM HOLE FR 0 TO 33M
12:00	2.00	14.00	14:00	2	DRILL				DRILL 311MM HOLE FR 33M TO 45M
14:00	0.25	14.25	14:15	7	RIG SERVICE				RIG SERVICE F/T DIVERTER 6 SECONDS C/O
14:15	4.75	19.00	19:00	2	DRILL				DRILL 311MM HOLE FR 45M TO 88M
19:00	0.25	19.25	19:15	21	SAFETY MEETING				SAFETY MEETING HELD FOR SHIFT CHANGE W/ BOTH CREWS, R.M. AND OPERATORS REP
19:15	3.00	22.25	22:15	2	DRILL				DRILL 311MM HOLE 88M - 124M
22:15	0.50	22.75	22:45	5	COND MUD CIRC				CONDITION MUD CIRCULATE
22:45	1.25	24.00	00:00	6	TRIPS				TRIP OUT FOR BHA CHANGE, FLOW CHECK 112 M

Mud Checks

Type	Time	Depth (mKB)	Density (kg/m3)	Vis (s/L)	Plastic Visc (cp)	Yield Point (Pa)
GEL	22:00		1080.0	43		

Gel 10 sec (Pa)	Gel 10 min (Pa)	Gel 30 min (Pa)	Filtrate (mL/30min)	Filter Cake (mm)	pH	Solids (%)
					8.5	

MBT (kg/m3)	Percent Oil (%)	Percent Water (%)	Chloride (mg/L)	Calcium (mg/L)	Potassium (mg/L)	Electric Stab (V)

Whole Mud Added (m3)	Mud Lost to Hole (m3)	Mud Lost to Surface (m3)	Reserve Mud Volume (m3)	Active Mud Volume (m3)

Drill Strings

BHA #1, Drilling Assembly

Bit R...	Drill Bit	Make	IADC Bit Dull	TFA (incl Noz) (mm2)
1RR	311.0mm, XR1CPS, PGK175	Smith	-------	1,335

Nozzle (mm)	String Length (m)	String Wt (daN)	BHA ROP (m...
23.8/23.8/23.8	112.09		12.1

Cost Object Number	Original AFE Stop Amt
US-51822-EX-02-DR-ID	11,529,266.00

Primary Job Type	
Initial Drilling	

Start Date	End Date
2/17/2012	3/10/2012

Final Status	Spud Date
Drilled Cased	2/19/2012 11:30

Daily Cost Total	Cum Cost To Date
113,417.99	694,383.49

Daily Mud Cost	Mud Additive Cost To Date
5,890.59	5,890.59

Depth Start (mKB)	Depth End (mKB)
0.00	124.00

Last Casing String

Depth Progress (m): 124.00

Depth Start (TVD) (mKB)	Depth End (TVD) (mKB)
0.00	124.00

Target Formation	Est Total Depth (mKB)
Canol	1,412.00

Personnel Total Hours (hr)	Cum Per Tot Hr (hr)
684.00	1,812.00

Time Log Total Hours (hr)	Problem Time Hours (hr)
24.00	

Problem Time (%)	Cum Problem Time (%)

Days LTI (days)	Days RI (days)

Personnel Log

Company	Count	Tot Time (hr)
Nabors Drilling Limited	15	180.00
Mi Swaco	1	12.00
Apex Oilfield Service 2000 Inc.	1	12.00
NEW VENDOR	1	12.00
R G Mallett Oilfield Enterprise	1	12.00
McGrath Resource Consulting Ltd.	1	12.00
Horizon North Camp Cat	5	60.00
NEW VENDOR	2	24.00
NEW VENDOR	1	12.00
NEW VENDOR	2	24.00
NEW VENDOR	2	24.00
Hallmark Technical Service		0.00
Allen Oilfield	15	180.00
Husky	1	12.00
Total Oilfield Rental	3	36.00
Continental Laboratories	2	24.00
Hose Integrated Ltd.	1	12.00
Frontier	1	12.00
NEW VENDOR	1	12.00
NEW VENDOR	1	12.00

Safety Check Summary

Type	Last Date	Next Date
Safety Meeting	2/19/2012	2/20/2012

Rigs

Contractor	Rig Number
Nabors Drilling	23

Rig Supervisor	Phone Mobile
Troy Pre	

Rig Release Date: 3/10/2012 23:59

Mud Pumps

 # 1, GARDNER DENVER, PZ8

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	203.0

Liner Size (mm)	Vol/Stk OR (m3/stk)
152.0	0.011

Pres (kPa)	Slow Spd	Strokes (spm)	Eff (%)
		95	

 # 2, CONTINENTAL EMSCO, F800

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	229.0

Liner Size (mm)	Vol/Stk OR (m3/stk)
152.0	0.013

Pres (kPa)	Slow Spd	Strokes (spm)	Eff (%)
		95	

Mud Additive Amounts

Description	Cost (/unit)	Consumed
SODA ASH	15.87	2.0
FED ZAN D	105.76	2.0
FEDERAL GEL	12.43	55.0
FED ZAN D	105.76	1.0
SODA ASH	15.87	2.0
FEDERAL GEL	12.43	20.0

Report Printed: 6/4/2012

Well Name: HUSKY LITTLE BEAR H-64

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread
Drill pipe - Sin□le□	0			0.00	
Drill pipe - Stand□	0			0.00	
HWDP(4.0 IN)	5	101.0		45.71	
X/O	1	165.0		0.71	
DC (6.25 IN)	2	165.0		18.97	
□ARS-HYD/MECH	1	163.0		6.97	
DC (6.25 IN)	2	165.0		18.96	
X/O	1	165.0		0.78	
MONEL	2	208.0		18.95	
BIT SUB	1	206.0		0.71	

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
Ori□inal Hole, 300H6465...	0.00	33.00	33.00	0.50	0.50	66.0	

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
4	60	800				1,400.0	

□ (□in□) (m□/min)	T (In□) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
Ori□inal Hole, 300H6465...	33.00	124.00	124.00	9.75	10.25	9.3	

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
5	140	600				1,500.0	

□ (□in□) (m□/min)	T (In□) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

Kick/Lost Circ

Occ□r Date	Occ□r Depth (mKB)	Control Date	Control Depth (mKB)	Incident Type

Comment

Casing Strings

Ca□in□ De□cription	R□n Date	Set Depth (mKB)

Comment

Casing Components

Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...

Mud Additive Amounts

De□cription	Co□t (/□nit)	Con□□med
FED WATE (BARITE)	15.57	294.0

Survey Data

MD (mKB)	Incl (°)	A□m (°)	TVD (mKB)
42.00	0.20	69.40	42.00
72.00	0.40	53.80	72.00
109.52	0.50	50.50	109.52

Last 5 Formations

Formation Name	Pro□ Top (TVD) (mKB)	Drill Top MD (mKB)

Hole Size (mm)

Max Nominal OD (mm)

Husky Energy — Daily Drilling - Detail (legal size)

Report Start Date: 2/20/2012
Report #: 4, DFS: 1.52
Depth Progress: 184.00

Well Name: HUSKY LITTLE BEAR H-64

License UWI	Surface Legal Location	License No.	State/Province
300H64650012600	300H64650012600	462	N.W.T

Sour Class	ERP Required	Lahee Classification	Business Unit
Sweet	No	TH (C)	Canada Frontier - Exploration

Initial Ground Elevation (m)	Cut/Fill (m)	Ground Elv. (m)	KB Elevation (m)	KB to Gnd (m)
178.00	0.0	178.00	183.20	5.20

KB-Casing Flange Distance (m)	KB-Tubing Head Distance (m)	Total Depth All (TVD) (mKB)
5.47	5.00	Original Hole - 1340.8

Primary Wellbore Affected: Original Hole, 300H64650012600

Weather	Temperature (°C)	Road Condition	Hole Condition
Overcast	-16	Fair	Good

Operation at Report Time	Operation Next Report Period
Drillin from 308m	Drill f/ 308m to casing point.

Operation 06:00
Drill from 385m

Operation Summary
Continued to pull out of the hole for Bit #2 and directional tool. Serviced the rig, Drained the diverter and functioned the HCR. Held a BOP drill. Held a pre-tour safety meeting with the directional driller. Picked up directional tool and bit #2. Thaw mud line from the pump to the top of the stand pipe. Remove the kelly hose and thaw out. Installed the kelly hose, kicker hose. Held a BOP drill and then trip in the hole with the directional tool. Shallow test the MWD and Gamma at 57m and at 87m. Wash 1 single to bottom and then drilled ahead from 124 to 170m. Serviced the rig and functioned the diverter. Drilled from 170m to 225m with directional survey and gamma. Crew change meeting. Drilled from 225m to 308m and MWD survey. Started slide 234m for correction.

Remark
No Accident, 1 -Incident or Enviromental Concern. Over flow tank inside tank farm berm containment. No spillage outside the tank farm containment. Direction to the location. From Norman Well, Take the winter road south for approx 34.4km. Turn right and go through the security. Continue on the Husky Winter Rd to the Husky Camp Site. Continue on the Husky Winter Rd to km 44 Turn left and continue to km 46. Keep left and go to location at km 47. All road are RADIO CONTROLLED. Tank Farm deleivered for Little Bear N-9 Base Oil Delivered today 26m3, Total at Tank Farm 26m3. Invert Delivered today 165m3, Total at Tank Farm 165m3 Estimated 8m3 lost in transfer from well to well Daily invert lose: 0.0 m3 Cumulative invert lose: m3

Daily Contacts

Type	Contact Name	Title	Mobile
Office	Kim Richardson	DR Superintendent	403-542-1059
Office	Goly Zilai	DR Eng	403-462-8021
Office	Sandeep Randhawa	DR Eng	403-519-5660
Office	Darren Brown	Construction Super	
Well Site Supervisor	Cal Conklin	DR Field Super	403-502-3387
Well Site Supervisor	Woody Periard	DR Field Super	403-350-6027
Well Site Supervisor	Dan Heidorfer	DR Field Super	780-446-5160
Rig Manager	Troy Pre	Rig Manager	

Time Log

Start Time	Dur (hr)	Cum Dur (hr)	End Time	Activity Code	Activity Desc.	Prod/U...	Problem Time (hr)	Problem Ref	Comment
00:00	0.75	0.75	00:45	6	TRIPS				CONT. TRIP OUT OF HOLE FLOW CHECK ON BANK
00:45	0.25	1.00	01:00	7	RIG SERVICE				RIG SERVICE DRAIN DIVERTER FUNCTION HCR
01:00	0.25	1.25	01:15	21	SAFETY MEETING				DRILLS/BOP, ETC. BOP DRILL ON SURFACE W/DIVERTOR OPERATION
01:15	0.25	1.50	01:30	21	SAFETY MEETING				PRE-JOB SAFETY WITH CREW PHOENIX DIRECTIONAL HANDS
01:30	2.75	4.25	04:15	20	DIR. WORK				DIRECTIONAL WORK, PICK UP MUD MOTOR, SCRIBE, INSTALL MWD TOOLS AND MAKE UP BIT
04:15	2.75	7.00	07:00	8	REPAIR RIG				DOWNTIME - THAW OUT STANDPIPE, REMOVE KELLY HOSE LAY OUT TO THAW
07:00	0.25	7.25	07:15	21	SAFETY MEETING				PRE TOUR SAFETY MEETING
07:15	2.00	9.25	09:15	8	REPAIR RIG				DOWNTIME - CNT TO THAW OUT STANDPIPE HOOK KICKER KELLY HOSE BACK UP
09:15	0.25	9.50	09:30	21	SAFETY MEETING				DRILLS/BOP, ETC. BOP DRILL ON SURFACE W/DIVERTOR OPERATION
09:30	2.50	12.00	12:00	6	TRIPS				TRIP IN HOLE W/DIRC TOOLS, TEST TOOL 57M , 87M
12:00	0.75	12.75	12:45	6	TRIPS				TRIP IN HOLE PICK UP SINGLE
12:45	3.25	16.00	16:00	2	DRILL				DRILL 311MM HOLE FR 124M TO 170M
16:00	0.25	16.25	16:15	7	RIG SERVICE				RIG SERVICE F/T DIVERTER 6 SECONDS C/O
16:15	1.75	18.00	18:00	2	DRILL				DRILL 311 MM HOLE FR170M TO 225M
18:00	1.00	19.00	19:00	20	DIR. WORK				DIRECTIONAL SURVEYS , SYNC GAMMA , CONNECTIONS
19:00	0.25	19.25	19:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING WITH OTHER CREW
19:15	3.75	23.00	23:00	2	DRILL				DRILL 311MM SURFACE HOLE 225M - 308M

Cost Object Number	Original AFE Sup Amt
US-51822-EX-02-DR-ID	11,529,266.00

Primary Job Type	
Initial Drillin	

Start Date	End Date
2/17/2012	3/10/2012
Final Status: Drilled Cased	Spud Date: 2/19/2012 11:30
Daily Cost Total: 126,411.80	Cum Cost To Date: 820,795.29
Daily Mud Cost: 1,692.80	Mud Additive Cost To Date: 7,583.39
Depth Start (mKB): 124.00	Depth End (mKB): 308.00
Last Casing String	
Depth Progress (m): 184.00	
Depth Start (TVD) (mKB): 124.00	Depth End (TVD) (mKB): 307.95
Target Formation: Canol	Est Total Depth (mKB): 1,412.00
Personnel Total Hours (hr): 528.00	Cum Per Tot Hr (hr): 2,340.00
Time Log Total Hours (hr): 24.00	Problem Time Hours (hr):
Problem Time ():	Cum Problem Time ()
Day LTI (day):	Day RI (day):

Personnel Log

Company	Count	Tot Time (hr)
Nabor Drilling Limited	15	180.00
Mi Swaco	1	12.00
Apex Oilfield Service 2000 Inc.	1	12.00
NEW VENDOR	1	12.00
R G Mallett Oilfield Enterprise	1	12.00
McGrath Resource Consulting Ltd.	1	12.00
Horizon North Camp Cat	5	60.00
NEW VENDOR	2	24.00
NEW VENDOR	1	12.00
NEW VENDOR	2	24.00
NEW VENDOR	2	24.00
Hallmark Technical Service		0.00
Husky	1	12.00
Total Oilfield Rental	3	36.00
Continental Laboratories	2	24.00
Hose Integrated Ltd.	1	12.00
Frontier	1	12.00
NEW VENDOR	1	12.00
NEW VENDOR	1	12.00
Hallmark Technical Service	2	24.00

Safety Check Summary

Type	Last Date	Next Date
Safety Meetin	2/20/2012	2/21/2012

Rigs

Contractor	Rig Number
Nabor Drilling	23
Rig Supervisor: Troy Pre	Phone Mobile
Rig Release Date: 3/10/2012 23:59	

Mud Pumps

 # 1, GARDNER DENVER, PZ8

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	203.0
Liner Size (mm): 152.0	Vol/Stk OR (m/tk): 0.011	
Pres (kPa): 9,500	Slow Spd	Strokes (spm): 100 — Eff (): 95

 # 2, CONTINENTAL EMSCO, F800

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	229.0
Liner Size (mm): 152.0	Vol/Stk OR (m/tk): 0.013	
Pres (kPa): 9,500	Slow Spd	Strokes (spm): 100 — Eff (): 95

Mud Additive Amounts

Description	Cost (/Unit)	Consumed
FED ZAN D	105.76	6.0
FEDERAL GEL	12.43	20.0
FED WATE (BARITE)	15.57	52.0

Report Printed: 6/4/2012

Well Name: HUSKY LITTLE BEAR H-64

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
23:00	1.00	24.00	00:00	20	DIR. WORK				DIRECTIONAL SURVEYS, SYNCH GAMMA, AND CONNECTIONS ACCUMULATED

Mud Checks

Type	Time	Depth (mKB)	Den□ity (k□/m□)	Vi□ (□/L)	Pla□tic Vi□c (cp)	Yield Point (Pa)
Gel Ba□e	18:30	218.00	1140.0	43	8.0	3.000

Gel 10 □ec (Pa)	Gel 10 min (Pa)	Gel 30 min (Pa)	Filtrate (mL/30min)	Filter Cake (mm)	pH	Solid□ (□)
4.000	7.000	11.000	15.0	1.0	8.5	

MBT (k□/m□)	Percent Oil (□)	Percent Water (□)	Chloride□ (m□/L)	Calci□m (m□/L)	Pota□□i□m (m□/L)	Electric Sta□ (V)
21			160.000	60.000		

Whole M□d Added (m□)	M□d Lo□t to Hole (m□)	M□d Lo□t to S□rface (m□)	Re□erve M□d Vol□me (m□)	Active M□d Vol□me (m□)

Type	Time	Depth (mKB)	Den□ity (k□/m□)	Vi□ (□/L)	Pla□tic Vi□c (cp)	Yield Point (Pa)
GEL	22:00		1140.0	43		

Gel 10 □ec (Pa)	Gel 10 min (Pa)	Gel 30 min (Pa)	Filtrate (mL/30min)	Filter Cake (mm)	pH	Solid□ (□)
					8.5	

MBT (k□/m□)	Percent Oil (□)	Percent Water (□)	Chloride□ (m□/L)	Calci□m (m□/L)	Pota□□i□m (m□/L)	Electric Sta□ (V)

Whole M□d Added (m□)	M□d Lo□t to Hole (m□)	M□d Lo□t to S□rface (m□)	Re□erve M□d Vol□me (m□)	Active M□d Vol□me (m□)

Drill Strings

BHA #2, Drilling Assembly

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)
2	311.0mm, M516, □Y0376	Smith	1-1-CC-H-X-0.00-CC-CP	583

No□□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...
10.3/10.3/10.3/10.3/10.3/10.3/10.3	501.77		18.3

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread
Drill pipe - Sin□le□	0			0.00	
Drill pipe - Stand□	19			353.89	
HWDP(4.0 IN)	8	101.0		72.64	
X/O	1	165.0		0.71	
DC (6.25 IN)	3	165.0		28.45	
□ARS-HYD/MECH	1	163.0		6.97	
DC (6.25 IN)	1	165.0		9.48	
X/O	1	205.0		0.78	
MONEL	2	207.0		18.92	
UBHO	1	203.0		0.98	
MOTOR HS	1	197.0		8.60	

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
Ori□inal Hole, 300H6465...	124.00	308.00	184.00	8.75	8.75	21.0	2.400

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
2	45	9,500	19,000	19,000	19,000	2,200.0	

□ (□in□) (m□/min)	T (In□) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

Kick/Lost Circ

Occ□r Date	Occ□r Depth (mKB)	Control Date	Control Depth (mKB)	Incident Type

Comment

Casing Strings

Ca□in□ De□cription	R□n Date	Set Depth (mKB)

Comment

Casing Components

Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...

Survey Data

MD (mKB)	Incl (°)	A□m (°)	TVD (mKB)
415.68	2.30	171.10	415.57
434.02	1.60	160.70	433.90
452.48	1.10	135.30	452.36
471.60	1.30	113.60	471.47
495.00	1.20	116.50	494.87

Last 5 Formations

Formation Name	Pro□ Top (TVD) (mKB)	Drill Top MD (mKB)

Hole Size (mm)

Max Nominal OD (mm)

Husky Energy — Daily Drilling - Detail (legal size)

Report Start Date: 2/21/2012
Report #: 5, DFS: 2.52
Depth Progress: 166.00

Well Name: HUSKY LITTLE BEAR H-64

Licenced UWI	Surface Legal Location	Licence No.	State/Province
300H64650012600	300H64650012600	462	N.W.T

Sour Class	ERP Required	Lahee Classification	Business Unit
Sweet	No	TH (C)	Canada Frontier - Exploration

Initial Ground Elevation (m)	Cut/Fill (m)	Ground Elv. (m)	KB Elevation (m)	KB to Gnd (m)
178.00	0.0	178.00	183.20	5.20

KB-Casing Flange Distance (m)	KB-Tubing Head Distance (m)	Total Depth All (TVD) (mKB)
5.47	5.00	Original Hole - 1340.8

Primary Wellbore Affected: Original Hole, 300H64650012600

Weather	Temperature (°C)	Road Condition	Hole Condition
Light snow	-18	Fair	Good

Operation at Report Time	Operation Next Report Period
Wash in from 450m.	Wash to bottom. Drill to 510m CP. Wiper trip. Trip out. Run cement casing

Operation 06:00	Operation Summary
Wiper trip 2 start in	Drilled 311mm surface hole from 308m to 346m. Relocated the gamma from 324m to 346m. Drilled ahead from 346m to 394m. Serviced the rig, drained and functioned the HCR. Held a crew hand over and a safety meeting. Drilled ahead to 476m with directional tools with survey. Drilled ahead from 476m to 503m. Circulate and wait for geologist to pick csg point. Serviced the rig and functioned the diverter. Wiper tripped to surface and then ran back in the hole to 222m. Held a crew hand over and a safety meeting. Continued to run in the hole to 296m. Break circ and wash through a ridge at 296m. RIH to 323m. Picked up the kelly and washed through ridge from 323m to 333m and from 360m to 370m. Run to 400m then work tight hole to get pipe free and install kelly. Circulate and wash down from 390m to 450m.

Remark
No Accident, 1 -Incident or Enviromental Concern. Vac truck driver overfilled an evaporator and spilt approx 250 liters of dirty water onto the ground. Approx 100 liters of dirty water and ice was cleaned up. Directions to the location. From Norman Well, Take the winter road south for approx 34.4km. Turn right and go through the security. Continue on the Husky Winter Rd to the Husky Camp Site. Continue on the Husky Winter Rd to km 44 Turn left and continue to km 46. Keep left and go to location at km 47. All roads are RADIO CONTROLLED. Tank Farm delivered for Little Bear N-9 Base Oil Delivered today 26m3, Total at Tank Farm 26m3. Invert Delivered today 165m3, Total at Tank Farm 165m3 Estimated 8m3 lost in transfer from well to well Daily invert loss: 0.0 m3

Daily Contacts

Type	Contact Name	Title	Mobile
Office	Kim Richardson	DR Superintendent	403-542-1059
Office	Goly Zilai	DR Engr	403-462-8021
Office	Sandeep Randhawa	DR Engr	403-519-5660
Office	Darren Brown	Construction Super	
Well Site Supervisor	Cal Conklin	DR Field Super	403-502-3387
Well Site Supervisor	Woody Periard	DR Field Super	403-350-6027
Well Site Supervisor	Dan Heydorfer	DR Field Super	780-446-5160
Rig Manager	Troy Pree	Rig Manager	

Time Log

Start Time	Dur (hr)	Cum Dur (hr)	End Time	Activity Code	Activity Desc.	Prob/U...	Problem Time (hr)	Problem Ref	Comment
00:00	2.50	2.50	02:30	2	DRILL				DRILL 311MM HOLE 308M - 346M
02:30	1.00	3.50	03:30	20	DIR. WORK				DIRECTIONAL WORK, RE-GAMMA LOG 324M - 346M
03:30	2.25	5.75	05:45	2	DRILL				DRILL 311MM HOLE 346M - 394M
05:45	0.25	6.00	06:00	7	RIG SERVICE				RIG SERVICE, DRAIN DIVERTER AND FUNCTION HCR(2 SEC)
06:00	1.00	7.00	07:00	20	DIR. WORK				DIRECTIONAL SURVEYS, GAMMA SYNCHS AND CONNECTIONS ACCUMULATED
07:00	0.25	7.25	07:15	21	SAFETY MEETING				SAFETY MEETING HELD FOR SHIFT CHANGE W/ BOTH CREWS, R.M. AND OPERATORS REP.
07:15	3.75	11.00	11:00	2	DRILL				DRILL 311MM HOLE 394M - TO 476M
11:00	1.00	12.00	12:00	20	DIR. WORK				DIRECTIONAL SURVEYS, SYNC GAMMA, CONNECTIONS
12:00	1.50	13.50	13:30	2	DRILL				DRILL 311MM HOLE FR 476M TO 503M
13:30	1.75	15.25	15:15	23	WAITING ON				W/O ORDERS FROM GEO TO DRILL OR CALL IT TD
15:15	0.25	15.50	15:30	7	RIG SERVICE				RIG SERVICE F/T DIVERTER 6 SECONDS C/O
15:30	2.00	17.50	17:30	6	TRIPS				TRIP OUT OF HOLE , WIPER TRIP , FLOE CHECKS 389M, 149M, OUT OF HOLE CAL 3.18 MESR 4.51 DIFF 1.33 M3
17:30	1.50	19.00	19:00	6	TRIPS				TRIP IN HOLE
19:00	0.25	19.25	19:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING WITH OTHER CREW
19:15	2.25	21.50	21:30	6	TRIPS				CONTINUE TO TRIP IN TO 405M, ENCOUNTER BRIDGE
21:30	1.00	22.50	22:30	6	TRIPS				WORK TIGHT HOLE
22:30	1.50	24.00	00:00	6	TRIPS				TRIP IN HOLE, WASH 395M - 450M

Cost Object Number	Orig AFE Sup Amt
US-51822-EX-02-DR-ID	11,529,266.00

Primary Job Type
Initial Drilling

Start Date	End Date
2/17/2012	3/10/2012
Final Status: Drilled - Cased	Spud Date: 2/19/2012 11:30
Daily Cost Total: 187,912.86	Cum Cost To Date: 1,008,708.15
Daily Mud Cost: 763.86	Mud Additive Cost To Date: 8,347.25
Depth Start (mKB): 308.00	Depth End (mKB): 503.00
Last Casing Strin	
Depth Progress (m): 166.00	
Depth Start (TVD) (mKB): 307.95	Depth End (TVD) (mKB): 502.87
Target Formation: Canol	Est Total Depth (mKB): 1,412.00
Personnel Total Hours (hr): 516.00	Cum Per Tot Hr (hr): 2,856.00
Time Lost Total Hours (hr): 24.00	Problem Time Hours (hr)
Problem Time (hr)	Cum Problem Time (hr)
Day LTI (day)	Day RI (day)

Personnel Log

Company	Count	Tot Time (hr)
Nabor Drilling Limited	15	180.00
Mi Swaco	1	12.00
Apex Oilfield Service 2000 Inc.	1	12.00
NEW VENDOR	1	12.00
R G Mallett Oilfield Enterprise	1	12.00
McGrath Resource Consulting Ltd.	1	12.00
Horizon North Camp Cat	5	60.00
NEW VENDOR	2	24.00
NEW VENDOR	1	12.00
NEW VENDOR	2	24.00
NEW VENDOR	2	24.00
Continental Laboratories	2	24.00
Hoe Integrated Ltd.	1	12.00
Frontier	1	12.00
NEW VENDOR	1	12.00
NEW VENDOR	1	12.00
Hallmark Technical Service	2	24.00
Phoenix Technology Service LP	3	36.00

Safety Check Summary

Type	Last Date	Next Date
Safety Meeting	2/21/2012	2/22/2012

Rigs

Contractor	Rig Number
Nabor Drilling	23
Rig Supervisor: Troy Pree	Phone Mobile
Rig Release Date: 3/10/2012 23:59	

Mud Pumps

 # 1, GARDNER DENVER, PZ8

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	203.0

Liner Size (mm)	Vol/Stk OR (m3/stk)
152.0	0.011

Pres (kPa)	Slow Spd	Strokes (spm)	Eff (%)
		105	

 # 2, CONTINENTAL EMSCO, F800

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	229.0

Liner Size (mm)	Vol/Stk OR (m3/stk)
152.0	0.013

Pres (kPa)	Slow Spd	Strokes (spm)	Eff (%)
		105	

Mud Additive Amounts

Description	Cost (/unit)	Consumed
FED ZAN D	105.76	1.0
FEDERAL GEL	12.43	15.0
SAWDUST	4.12	20.0
FED WATE (BARITE)	15.57	25.0

Report Printed: 6/4/2012

Well Name: HUSKY LITTLE BEAR H-64

Mud Checks

Type	Time	Depth (mKB)	Den□ity (k□/m□)	Vi□ (□/L)	Pla□tic Vi□c (cp)	Yield Point (Pa)
GEL	14:00		1190.0	45		

Gel 10 □ec (Pa)	Gel 10 min (Pa)	Gel 30 min (Pa)	Filtrate (mL/30min)	Filter Cake (mm)	pH	Solid□ (□)

MBT (k□/m□)	Percent Oil (□)	Percent Water (□)	Chloride□ (m□/L)	Calci□m (m□/L)	Pota□□i□m (m□/L)	Electric Sta□ (V)

Whole M□d Added (m□)	M□d Lo□t to Hole (m□)	M□d Lo□t to S□rface (m□)	Re□erve M□d Vol□me (m□)	Active M□d Vol□me (m□)

Survey Data

MD (mKB)	Incl (°)	A□m (°)	TVD (mKB)

Last 5 Formations

Formation Name	Pro□ Top (TVD) (mKB)	Drill Top MD (mKB)

Hole Size (mm)

Max Nominal OD (mm)

Drill Strings

BHA #2, Drilling Assembly

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)
2	311.0mm, M516, □Y0376	Smith	1-1-CC-H-X-0.00-CC-CP	583

No□□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...
10.3/10.3/10.3/10.3/10.3/10.3/10.3	501.77		18.3

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread
Drill pipe - Sin□le□	0			0.00	
Drill pipe - Stand□	19			353.89	
HWDP(4.0 IN)	8	101.0		72.64	
X/O	1	165.0		0.71	
DC (6.25 IN)	3	165.0		28.45	
□ARS-HYD/MECH	1	163.0		6.97	
DC (6.25 IN)	1	165.0		9.48	
X/O	1	205.0		0.78	
MONEL	2	207.0		18.92	
UBHO	1	203.0		0.98	
MOTOR HS	1	197.0		8.60	

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
Ori□inal Hole, 300H6465...	308.00	447.00	323.00	8.50	17.25	16.4	2.400

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
4	45	12,700				5,000.0	

□ (□in) (m□/min)	T (In) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
Ori□inal Hole, 300H6465...	476.00	503.00	350.00	1.50	18.75	18.0	2.400

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
4	45	11,000	23,000			4,500.0	

□ (□in) (m□/min)	T (In) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

Kick/Lost Circ

Occ□r Date	Occ□r Depth (mKB)	Control Date	Control Depth (mKB)	Incident Type

Comment

Casing Strings

Ca□in□ De□cription	R□n Date	Set Depth (mKB)

Comment

Casing Components

Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...

Husky Energy — Daily Drilling - Detail (legal size)

Report Start Date: 2/22/2012
Report #: 6, DFS: 3.52
Depth Progress: 7.00

Well Name: HUSKY LITTLE BEAR H-64

Licensed UWI	Surface Legal Location	Licence No.	State/Province
300H64650012600	300H64650012600	462	N.W.T

Spud Class	ERP Required	Lahee Classification	Business Unit
Sweet	No	TH (C)	Canada Frontier - Exploration

Initial Ground Elevation (m)	Cut/Fill (m)	Ground Elv. (m)	KB Elevation (m)	KB to Gnd (m)
178.00	0.0	178.00	183.20	5.20

KB-Casing Flange Distance (m)	KB-Tubing Head Distance (m)	Total Depth All (TVD) (mKB)
5.47	5.00	Original Hole - 1340.8

Primary Wellbore Affected: Original Hole, 300H64650012600

Weather	Temperature (°C)	Road Condition	Hole Condition
Light snow	-18	Fair	Good

Operation at Report Time	Operation Next Report Period
Circulate and condition the mud and hole for cemen	Cement, WOC, cut casing and weld bowl. Nipple up BOP and test

Operation 06:00	Operation Summary
WOC	Trip in the hole. Break down stand and wash to bottom from 450m. Circulated the hole clean. Drilled ahead from 503m to 510m. Circulate and conditioned the hole. Wiper tripped to the conductor shoe. Ran back in the hole and wash 9 m to bottom. Held a crew hand over and a safety meeting. Circulated and conditioned the hole for cas. Pulled out of the hole and layed down the directional tools. Held a safety meeting with the power tongs. Held a safety stand down meeting with Mike Mackinnon and Sandeep Rhanwa. Rigged up the power tongs. Held a crew hand over and a safety meeting with the power tong operator. Leveled the rig and ran casing. Circulated the last 2 mt to bottom. 510m. Circulated casing and conditioned the mud and wellbore. Held a safety standdown meeting with the rig crew. . Continued to condition the mud.

Remarks:
No Accident, Incident or Enviromental Concern. Direction to the location. From Norman Well, Take the winter road south for approx 34.4km. Turn right and go through the security. Continue on the Husky Winter Rd to the Husky Camp Site. Continue on the Husky Winter Rd to km 44 Turn left and continue to km 46. Keep left and go to location at km 47. All road are RADIO CONTROLLED. Tank Farm delivered for Little Bear N-9 Base Oil Delivered today 26m3, Total at Tank Farm 26m3. Invert Delivered today 165m3, Total at Tank Farm 165m3 Estimated 8m3 lost in transfer from well to well Daily invert loss: 0.0 m3

Cost Object Number	Original AFE Supp Amt
US-51822-EX-02-DR-ID	11,529,266.00

Primary Job Type	
Initial Drilling	

Start Date	End Date
2/17/2012	3/10/2012

Final Status	Spud Date
Drilled Cased	2/19/2012 11:30

Daily Cost Total	Cum Cost To Date
109,423.22	1,118,131.37

Daily Mud Cost	Mud Additive Cost To Date
379.22	8,726.47

Depth Start (mKB)	Depth End (mKB)
503.00	510.00

Last Casing String: Surface, 510.00mKB

Depth Progress (m): 7.00

Depth Start (TVD) (mKB)	Depth End (TVD) (mKB)
502.87	509.86

Target Formation	Est Total Depth (mKB)
Canol	1,412.00

Personnel Total Hours (hr)	Cum Per Tot Hr (hr)
516.00	3,372.00

Time Log Total Hours (hr)	Problem Time Hours (hr)
24.00	

Problem Time (h)	Cum Problem Time (h)

Days LTI (days)	Days RI (days)

Daily Contacts

Type	Contact Name	Title	Mobile
Office	Kim Richardson	DR Superintendent	403-542-1059
Office	Goly Zilati	DR Engr	403-462-8021
Office	Sandeep Randhawa	DR Engr	403-519-5660
Office	Darren Brown	Construction Super	
Well Site Supervisor	Cal Conklin	DR Field Super	403-502-3387
Well Site Supervisor	Woody Periard	DR Field Super	403-350-6027
Well Site Supervisor	Dan Heydorfer	DR Field Super	780-446-5160
Rig Manager	Troy Pree	Rig Manager	

Time Log

Start Time	Dur (hr)	Cum Dur (hr)	End Time	Activity Code	Activity Desc.	Prob/U...	Problem Time (hr)	Problem Ref	Comment
00:00	0.75	0.75	00:45	6	TRIPS				TRIP IN, BREAK DOWN STANDS AND WASH 450M - BOTTOM
00:45	0.50	1.25	01:15	5	COND MUD & CIRC				CIRCULATE PRIOR TO DRILL AHEAD
01:15	0.75	2.00	02:00	2	DRILL				DRILL 311MM HOLE 503M - 510M
02:00	1.00	3.00	03:00	5	COND MUD & CIRC				CONDITION MUD & CIRCULATE PRIOR TO TRIP
03:00	2.50	5.50	05:30	6	TRIPS				WIPER TRIP OUT TO 8"
05:30	1.25	6.75	06:45	6	TRIPS				TRIP IN TO 492M, FLOW CHECK, BREAK CIRCULATION
06:45	0.25	7.00	07:00	21	SAFETY MEETING				SAFETY MEETING HELD FOR SHIFT CHANGE W/ BOTH CREWS, R.M. AND OPERATORS REP.
07:00	0.25	7.25	07:15	6	TRIPS				TRIP IN, WASH 492M - 510M
07:15	1.50	8.75	08:45	5	COND MUD & CIRC				CIRCULATE AND CLEAN HOLE
08:45	1.75	10.50	10:30	6	TRIPS				TRIP OUT OF HOLE , FLOW CHECK & 500M , 445M, 168M, OUT OF HOLE CAL 3.16M3-MERS 4.26M3&DIFF 1.10M3
10:30	0.25	10.75	10:45	21	SAFETY MEETING				SAFETY MEETING DIRCTIOANL
10:45	1.25	12.00	12:00	20	DIR. WORK				DIRECTIONAL WORK
12:00	0.75	12.75	12:45	20	DIR. WORK				DIRECTIONAL WORK
12:45	0.25	13.00	13:00	21	SAFETY MEETING				SAFETY MEETING WITH POWER TONG GUYS
13:00	0.75	13.75	13:45	21	SAFETY MEETING				SAFETY STAND-DOWN WITH ALL HUSKY REPS & OPERATORS, RM, & CREWS
13:45	1.25	15.00	15:00	12	RUN CASING AND CEMENT				RIG UP POWER TONG TO RUN CASING
15:00	0.25	15.25	15:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING WITH OTHER CREW
15:15	0.25	15.50	15:30	21	SAFETY MEETING				PRE-&OB SAFETY WITH HALLMARK PRIOR TO RUN CASING

Personnel Log

Company	Count	Tot Time (hr)
Nabors Drilling Limited	15	180.00
Mi Swaco	1	12.00
Apex Oilfield Service 2000 Inc.	1	12.00
&NEW VENDOR&	1	12.00
R G Mallett Oilfield Enterprise&	1	12.00
McGrath Resource Consulting Ltd.	1	12.00
Horizon North Camp & Cat	5	60.00
&NEW VENDOR&	2	24.00
&NEW VENDOR&	1	12.00
&NEW VENDOR&	2	24.00
&NEW VENDOR&	2	24.00
Continental Laboratories&	2	24.00
Hse Integrated Ltd.	1	12.00
Frontier	1	12.00
&NEW VENDOR&	1	12.00
&NEW VENDOR&	1	12.00
Hallmark Technical Service	2	24.00
Phoenix Technology Service&LP	3	36.00

Safety Check Summary

Type	Last Date	Next Date
Safety Meeting	2/22/2012	2/23/2012

Rigs

Contractor	Rig Number
Nabors Drilling	23

Rig Supervisor	Phone Mobile
Troy Pree	

Rig Release Date: 3/10/2012 23:59

Mud Pumps

1, GARDNER DENVER, PZ8

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	203.0

Liner Size (mm)	Vol/Stk OR (m3/stk)
152.0	0.011

Pres (kPa)	Slow Spd	Strokes (spm)	Eff (%)
		0	

2, CONTINENTAL EMSCO, F800

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	229.0

Liner Size (mm)	Vol/Stk OR (m3/stk)
152.0	0.013

Pres (kPa)	Slow Spd	Strokes (spm)	Eff (%)
11,700		105	95

Mud Additive Amounts

Description	Cost (/unit)	Consumed
FEDERAL GEL	12.43	22.0
FED ZAN D	105.76	1.0

Survey Data

MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Report Printed: 6/4/2012

Well Name: HUSKY LITTLE BEAR H-64

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
15:30	0.50	16.00	16:00	1	RIGUP □ TEARDOWN				LEVEL RIG
16:00	6.25	22.25	22:15	12	RUN CASING AND CEMENT				RUN CASING 9 5□8 □ CIRCULATE LAST 2 □OINTS TO BOTTOM
22:15	0.50	22.75	22:45	21	SAFETY MEETING				SAFETY STAND-DOWN WITH NIGHT CREW □ RM, □ ALL HUSKY REPS
22:45	1.25	24.00	00:00	5	COND MUD □ CIRC				CIRCULATE CSG AND CONDITION MUD

Mud Checks

Type	Time	Depth (mKB)	Den□ity (k□/m□)	Vi□ (□/L)	Pla□tic Vi□c (cp)	Yield Point (Pa)
GEL	03:00		1190.0	65		
Gel 10 □ec (Pa)	Gel 10 min (Pa)	Gel 30 min (Pa)	Filtrate (mL/30min)	Filter Cake (mm)	pH	Solid□ (□)
					8.5	
MBT (k□/m□)	Percent Oil (□)	Percent Water (□)	Chloride□ (m□/L)	Calci□m (m□/L)	Pota□i□m (m□/L)	Electric Sta□ (V)
Whole M□d Added (m□)	M□d Lo□t to Hole (m□)	M□d Lo□t to S□rface (m□)	Re□erve M□d Vol□me (m□)	Active M□d Vol□me (m□)		

Type	Time	Depth (mKB)	Den□ity (k□/m□)	Vi□ (□/L)	Pla□tic Vi□c (cp)	Yield Point (Pa)
Gel-Chem	08:00	510.00	1185.0	81	25.0	11.500
Gel 10 □ec (Pa)	Gel 10 min (Pa)	Gel 30 min (Pa)	Filtrate (mL/30min)	Filter Cake (mm)	pH	Solid□ (□)
7.500	16.500	22.500			8.5	
MBT (k□/m□)	Percent Oil (□)	Percent Water (□)	Chloride□ (m□/L)	Calci□m (m□/L)	Pota□i□m (m□/L)	Electric Sta□ (V)
71				100.000		
Whole M□d Added (m□)	M□d Lo□t to Hole (m□)	M□d Lo□t to S□rface (m□)	Re□erve M□d Vol□me (m□)	Active M□d Vol□me (m□)		
		0.75		76.90		

Drill Strings

BHA #2, Drilling Assembly

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)
2	311.0mm, M516, □Y0376	Smith	1-1-CC-H-X-0.00-CC-CP	583

No□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...
10.3/10.3/10.3/10.3/10.3/10.3/10.3	501.77		18.3

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread
Drill pipe - Sin□le□	0			0.00	
Drill pipe - Stand□	19			353.89	
HWDP(4.0 IN)	8	101.0		72.64	
X/O	1	165.0		0.71	
DC (6.25 IN)	3	165.0		28.45	
□ARS-HYD/MECH	1	163.0		6.97	
DC (6.25 IN)	1	165.0		9.48	
X/O	1	205.0		0.78	
MONEL	2	207.0		18.92	
UBHO	1	203.0		0.98	
MOTOR HS	1	197.0		8.60	

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
Ori□inal Hole, 300H6465...	503.00	510.00	357.00	0.75	19.50	9.3	2.400
WOB (daN)	**RPM (rpm)**	**SPP (kPa)**	**Drill Str Wt (daN)**	**PU Str Wt (daN)**	**SO Str Wt (daN)**	**Drillin□ Tor□□e**	**Off Btm T□**
4	45	11,700	23,000	25,000	22,000	4,500.0	
□ (□in) (m□/min)	**T (In) (°C)**	**P (BH Ann) (kPa)**	**T (□h) (°C)**	**P(S□rf Ann) (kPa)**	**T (□□rf ann) (°C)**	**□ (li□rtrn) (m□/...**	**□ (□ret□rn) (m□/...**

Kick/Lost Circ

Occ□r Date	Occ□r Depth (mKB)	Control Date	Control Depth (mKB)	Incident Type

Comment

Casing Strings

Ca□in□ De□cription	R□n Date	Set Depth (mKB)
S□rface	2/22/2012	510.00

Comment

Casing Components

Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...
Ca□in□ □oint□		244.5	□-55	53.574	37	510.73	-0.73	
Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...
Float Collar		244.5	□-55	53.574	1	14.34	495.66	
Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...
Ca□in□ □oint□		244.5	□-55	53.574	1	13.88	496.12	
Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...
Float Shoe		244.5	□-55	53.574	1	0.43	509.57	

Last 5 Formations

Formation Name	Pro□ Top (TVD) (mKB)	Drill Top MD (mKB)

Hole Size (mm)

Max Nominal OD (mm)
244.5

Husky Energy — Daily Drilling - Detail (legal size)

Report Start Date: 2/23/2012
Report #: 7, DFS: 4.52
Depth Progress: 0.00

Well Name: HUSKY LITTLE BEAR H-64

License UWI	Surface Legal Location	License No.	State/Province
300H64650012600	300H64650012600	462	N.W.T

Sour Class	ERP Required	Lahee Classification	Business Unit
Sweet	No	TH (C)	Canada Frontier - Exploration

Initial Ground Elevation (m)	Cut/Fill (m)	Ground Elv. (m)	KB Elevation (m)	KB to Gnd (m)
178.00	0.0	178.00	183.20	5.20

KB-Casing Flange Distance (m)	KB-Tubing Head Distance (m)	Total Depth All (TVD) (mKB)
5.47	5.00	Original Hole - 1340.8

Primary Wellbore Affected: Original Hole, 300H64650012600

Weather	Temperature (°C)	Road Condition	Hole Condition
Overcast	-17	Fair	Good

Operation at Report Time	Operation Next Report Period
Nipple up BOP	Nipple up. Pressure Test. RIH directional tool. Drill out. Condition FIT. Drill 222mm

Operation 06:00	Operation Summary
Pressure testing BOP	Circulate & condition mud for cementing. Held safety meeting with Schlumberger cement crew, and all other prior to cementing. Rig up to cement. Cement Detail: Pumped 4.0 m3 water, 43.0 tonne (40.0 m3) RFC blend & additive 1,740 kg/m3, Displaced with 20 m3 water. Plug down @ 03:10hr, Feb 23/2012. Good returns throughout w/ 20.0 m3 good cement return. Pressure test casing to 15,000 kPa for 10 minutes, Held good. Release pressure, float held. WOC, load out liquid mud for disposal. Safety meeting prior to lay down diverter and spool. Raise diverter, cut off casing, lay down dirverter. Cut off conductor & casing to height for casing head. Weld on casing head and let cool. Pressure test to 7,000 kPa with nitrogen. Held good. Pre job safety meeting. Pick up BOP and nipple up BOP. Crew change hand over and safety meeting. Continue nipple up.

Remarks:
No Accidents, Incidents or Enviromental Concerns.

Directions to the location. From Norman Wells, Take the winter road south for approx 34.4km. Turn right and go through the security. Continue on the Husky Winter Rd to the Husky Camp Site. Continue on the Husky Winter Rd to km 44 Turn left and continue to km 46. Keep left and go to location at km 47. All roads are RADIO CONTROLLED.

Tank Farm delivered for Little Bear N-9
Base Oil Delivered today 26m3, Total at Tank Farm 26m3.
Invert Delivered today 165m3, Total at Tank Farm 165m3
Estimated 8m3 lost in transfer from well to well

Daily invert loss: 0.0 m3

Daily Contacts

Type	Contact Name	Title	Mobile
Office	Kim Richardson	DR Superintendent	403-542-1059
Office	Goly Zilaji	DR Engr	403-462-8021
Office	Sandeep Randhawa	DR Engr	403-519-5660
Office	Darren Brown	Construction Super	
Well Site Supervisor	Cal Conklin	DR Field Super	403-502-3387
Well Site Supervisor	Woody Periard	DR Field Super	403-350-6027
Well Site Supervisor	Dan Heidorfer	DR Field Super	780-446-5160
Rig Manager	Troy Prefontaine	Rig Manager	

Time Log

Start Time	Dur (hr)	Cum Dur (hr)	End Time	Activity Code	Activity Desc.	Prob/U...	Problem Time (hr)	Problem Ref	Comment
00:00	1.00	1.00	01:00	5	COND MUD & CIRC				CIRCULATE CSG AND CONDITION MUD
01:00	0.25	1.25	01:15	21	SAFETY MEETING				SAFETY MEETING WITH CEMENTERS RIG CREW & RM OPERATORS REP
01:15	2.00	3.25	03:15	12	RUN CASING AND CEMENT				RIG UP TO & CEMENT CASING , PLUG DOWN AT 310 AM
03:15	3.75	7.00	07:00	13	WAIT ON CEMENT				WAIT ON CEMENT
07:00	0.25	7.25	07:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING WITH OTHER CREW
07:15	2.00	9.25	09:15	13	WAIT ON CEMENT				WAIT ON CEMENT
09:15	0.25	9.50	09:30	21	SAFETY MEETING				PRE-JOB SAFETY PRIOR TO LAY DOWN DEVERTER AND SPOOLS
09:30	1.00	10.50	10:30	14	NIPPLE UP B.O.P.				LAY DOWN DEVERTER FLOW T,LIFT DEVEERTER SYSTEM,CUT CASING
10:30	1.50	12.00	12:00	14	Nipple Up BOP				CUT CONDUCTOR PREP CASING TO WELD CASING BOWL
12:00	6.00	18.00	18:00	15	Test BOP				WELD CASING BOWL AND COOL AND PRESURE TEST HELD 1000 PSI TEN MIN
18:00	0.25	18.25	18:15	21	SAFETY MEETING				PRE-JOB SAFETY MEETING PRIOR TO PICK UP B.O.P
18:15	0.75	19.00	19:00	14	NIPPLE UP B.O.P.				NIPPLE UP BOPS
19:00	0.25	19.25	19:15	21	SAFETY MEETING				CREW CHANGE HAND OVWER AND PRE TOUR SAFETY MEETING

Cost Object Number	Orig AFE Sup Amt
US-51822-EX-02-DR-ID	11,529,266.00

Primary Job Type	
Initial Drilling	

Start Date	End Date
2/17/2012	3/10/2012

Final Status	Spud Date
Drilled & Cased	2/19/2012 11:30

Daily Cost Total	Cum Cost To Date
496,014.20	1,614,145.57

Daily Mud Cost	Mud Additive Cost To Date
	8,726.47

Depth Start (mKB)	Depth End (mKB)
510.00	510.00

Last Casing String: Surface, 510.00mKB

Depth Progress (m): 0.00

Depth Start (TVD) (mKB)	Depth End (TVD) (mKB)
509.86	509.86

Target Formation	Est Total Depth (mKB)
Canol	1,412.00

Personnel Total Hours (hr)	Cum Per Tot Hr (hr)
600.00	3,972.00

Time Log Total Hours (hr)	Problem Time Hours (hr)
24.00	

Problem Time (%)	Cum Problem Time (%)

Days LTI (days)	Days RI (days)

Personnel Log

Company	Count	Tot Time (hr)
Nabors Drilling Limited	15	180.00
Mi Swaco	1	12.00
Apex Oilfield Service 2000 Inc.	1	12.00
NEW VENDOR	1	12.00
R G Mallett Oilfield Enterprise	1	12.00
McRath Resource Consulting Ltd.	1	12.00
Horizon North Camp Cat	5	60.00
NEW VENDOR	2	24.00
NEW VENDOR	1	12.00
NEW VENDOR	2	24.00
NEW VENDOR	2	24.00
Continental Laboratories	2	24.00
Hoe Integrated Ltd.	1	12.00
Frontier	1	12.00
NEW VENDOR	1	12.00
NEW VENDOR	1	12.00
Hallmark Technical Service	2	24.00
Phoenix Technology Service LP	3	36.00
NEW VENDOR	6	72.00
Bill Eagle Limited Partnership	1	12.00

Safety Check Summary

Type	Last Date	Next Date
Safety Meeting	2/23/2012	2/24/2012

Rigs

Contractor	Rig Number
Nabors Drilling	23

Rig Supervisor	Phone Mobile
Troy Prefontaine	

Rig Release Date: 3/10/2012 23:59

Mud Pumps

 # 1, GARDNER DENVER, PZ8

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	203.0

Liner Size (mm)	Vol/Stk OR (m3/stk)
152.0	0.011

Pres (kPa)	Slow Spd	Strokes (spm)	Eff (%)
		0	

 # 2, CONTINENTAL EMSCO, F800

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	229.0

Liner Size (mm)	Vol/Stk OR (m3/stk)
152.0	0.013

Pres (kPa)	Slow Spd	Strokes (spm)	Eff (%)
		0	

Mud Additive Amounts

Description	Cost (/unit)	Consumed

Report Printed: 6/4/2012

Well Name: HUSKY LITTLE BEAR H-64

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
19:15	4.75	24.00	00:00	14	NIPPLE UP B.O.P.				NIPPLE UP BOP

Mud Checks

Type	Time	Depth (mKB)	Den□ity (k□/m□)	Vi□ (□/L)	Pla□tic Vi□c (cp)	Yield Point (Pa)
Gel 10 □ec (Pa)	Gel 10 min (Pa)	Gel 30 min (Pa)	Filtrate (mL/30min)	Filter Cake (mm)	pH	Solid□ (□)
MBT (k□/m□)	Percent Oil (□)	Percent Water (□)	Chloride□ (m□/L)	Calci□m (m□/L)	Pota□□i□m (m□/L)	Electric Sta□ (V)

Whole M□d Added (m□)	M□d Lo□t to Hole (m□)	M□d Lo□t to S□rface (m□)	Re□erve M□d Vol□me (m□)	Active M□d Vol□me (m□)

Drill Strings

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)

No□□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
□ (□in□) (m□/min)	T (In□) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

Kick/Lost Circ

Occ□r Date	Occ□r Depth (mKB)	Control Date	Control Depth (mKB)	Incident Type

Comment

Casing Strings

Ca□in□ De□cription	R□n Date	Set Depth (mKB)

Comment

Casing Components

Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...

Survey Data

MD (mKB)	Incl (°)	A□m (°)	TVD (mKB)

Last 5 Formations

Formation Name	Pro□ Top (TVD) (mKB)	Drill Top MD (mKB)

Hole Size (mm)

Max Nominal OD (mm)
244.5

Husky Energy — Daily Drilling - Detail (legal size)

Report Start Date: 2/24/2012
Report #: 8, DFS: 5.52
Depth Progress: 3.00

Well Name: HUSKY LITTLE BEAR H-64

Licen□ed UWI	S□rface Le□al Location	Licen□e No.	State/Province
300H64650012600	300H64650012600	462	N.W.T

So□r Cla□□	ERP Re□□ired	Lahee Cla□□ification	B□□ine□□Unit
Sweet	No	TH (C)	Canada Frontier - Exploration

Initial Gro□nd Elevation (m)	C□t/Fill (m)	Gro□nd Elv. (m)	KB Elevation (m)	KB to Gnd (m)
178.00	0.0	178.00	183.20	5.20

KB-Ca□in□Flan□e Di□tance (m)	KB-T□□in□Head Di□tance (m)	Total Depth All (TVD) (mKB)
5.47	5.00	Ori□inal Hole - 1340.8

Primary Well□ore Affected: Ori□inal Hole, 300H64650012600

Weather	Temperat□re (°C)	Road Condition	Hole Condition
Overca□t	-26	Fair	Good

Operation□at Report Time: Perform FIT.

Operation□Next Report Period: Perform FIT. Drill 222mm from 513m

Operation□□ 06:00: Drillin□ ahead at 609m.

Operation□S□mmary:
Pre□□□re te□ted the manifoldto 1400 kpa low and to 21000 kpa hi□h for 10 min□te□ each te□t. All te□t□were □ood. pre□□□re te□ted the Blind ram□, in□ide BOp and □ta□□in□valve to 1400 kpa low and to 21000 kpa hi□h for 10 min□te□each te□t. All te□t□were □ood. Pre□□□re te□ted the Pipe ram□to 1400 kpa low. the te□t wa□ □ood. Attempted to te□t the pipe ram□to 21000 kpa and the the □eal on the ram door leaked. Chan□ed o□t the □eal and te□ted the pipe ram□to 21,000 kpa. Pre□□□re te□ted the ann□lar to 1400 kpa low and to 10,500 kpa hi□h for 10 min□te□each te□t and te□t□were □ood. Te□ted the kill line valve□and the HCR valve and the o□t□ide valve to 1400 kpa and to 21000 kpa hi□h and the te□t□were □ood. Clo□ed the □lind ram□and pre□□□re te□ted the ca□in□ and the ca□in□ □owl to 10,000 kpa for 10 min□te□. Te□t wa□ □ood. F□nction te□ted the Acc□m□later and the motor kill□. Start pre□□□re on the acc□m. wa□20,300 kpa. Pre□□□re to clo□e the acc□m□lator wa□ 3,800 kpa, to clo□e the pipe ram□wa□700 kpa and to open the HCR wa□200 kpa and to open the pipe ram□wa□600 kpa. Total pre□□□re lo□□wa□5300 kpa with 17,000 kpa remainin□on the acc□m□lator. Rechar□e time wa□57 □ec. Pre-char□e on the acc□m□lator i□at 7,000 kpa. Nitro□en pre□□□re on the □ottle□were 21000 PSI, 2250PSI, 2400kpa and 2400kpa.All check□were □ood. Pre□□□re te□ted the kelly cock to 1400 kpa low and to 21000 kpa hi□h for 10 min□te□each te□t□and all te□t□were □ood.In□talled the wear □□□hin□and the Katch Kan on the drillin□nipple. Held a pre-□o□ □afety meetin□with the directional driller□and then picked □p the BHA. Ran in the hole to 491m. Removed the □ail□and the elevator□. Slipped and c□t the drill line. RIH ta□□ed cement □ 494m. Di□place to invert m□d. Drilled cement, float collar. Held BOP drill. Drill □ood cement from 497m to 510m. Drilled 3m new hole to 513m. Circ□late hole clean and ri□in Bi□ Ea□le pre□□□re te□tin□for FIT.

Remark□

No Accident□, Incident□or Enviromental Concern□.

Direction□to the location. From Norman Well□, Take the winter road □o□th for approx 34.4km. T□rn ri□ht and □o thro□□h the □ec□rity. Contin□e on the H□□ky Winter Rd to the H□□ky Camp Site. Contin□e on the H□□ky Winter Rd to km 44 T□rn left and contin□e to km 46. Keep left and □o to location at km 47. All road□are RADIO CONTROLLED.

Tank Farm delivered for Little Bear H-64
Ba□e Oil Delivered today □ 26m3, Total at Tank Farm □ 26m3.
Invert Delivered today □ 165m3, Total at Tank Farm □165m3
E□timated 8m3 lo□t in tran□fer from well to well

Daily invert lo□□e□: 0.0 m3

Daily Contacts

Type	Contact Name	Title	Mo□ile
Office	Kim Richard□on	DR S□perintendent	403-542-1059
Office	Goly Zila□i	DR En□	403-462-8021
Office	Sandeep Randhawa	DR En□	403-519-5660
Office	Darren Brown	Con□tr□ction S□per	
Well Site S□pervi□or	Cal Conklin	DR Field S□per	403-502-3387
Well Site S□pervi□or	Woody Periard	DR Field S□per	403-350-6027
Well Site S□pervi□or	Dan He□□dorfer	DR Field S□per	780-446-5160
Ri□ Mana□er	Troy Pre□□□	Ri□ Mana□er	

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
00:00	7.00	7.00	07:00	12	RUN CASING AND CEMENT				PRESSURE TEST ,MAINAFOLD , BOPS, STABBING VAVVLE, INSIDE BOP, KELLY VAVLE
07:00	0.25	7.25	07:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING WITH OTHER CREW
07:15	0.25	7.50	07:30	21	SAFETY MEETING				PRE-□OB SAFETY WITH BIG EAGLE PRESURE TESTING
07:30	4.50	12.00	12:00	12	RUN CASING AND CEMENT				CONTINUE PRESSURE TEST B.O.P AND ALL RELATED E□UIPMENT ALL TESTS HELD HIGH AND LOW 10 MIN AND RAMS PRESURE TESTED TO 21000KPA HIGH AND1400KPA LOW ANNULAR 1400 KPA LOW 12000 KPA HIGH
12:00	1.50	13.50	13:30	15	TEST B.O.P.				PRESSURE TEST BOPS RAMS AND ALL RELATED VALVES 1400 KPA LOW ABND 21000 KPA HIGH ANNULAR 1200 KPA LOW AND 12000 KPA HIGH
13:30	0.50	14.00	14:00	25					INSTALL WEAR BUSING

Co□t O□ect N□m□er	Ori□ AFE S□p Am
US-51822-EX-02-DR-ID	11,529,266.00

Primary □o□ Type	
Initial Drillin□	

Start Date	End Date
2/17/2012	3/10/2012
Final Stat□□	Sp□d Date
Drilled □ Ca□ed	2/19/2012 11:30
Daily Co□t Total	C□m Co□t To Date
225,605.26	1,839,750.83
Daily M□d Co□t	M□d Additive Co□t To Date
102,576.29	111,302.76
Depth Start (mKB)	Depth End (mKB)
510.00	513.00

La□t Ca□in□Strin□: S□rface, 510.00mKB

Depth Pro□re□□(m): 3.00

Depth Start (TVD) (mKB)	Depth End (TVD) (mKB)
509.86	512.86
Tar□et Formation	E□t Total Depth (mKB)
Canol	1,412.00
Per□onnel Total Ho□r□(hr□)	C□m Per□Tot Hr (hr□)
468.00	4,440.00
Time Lo□Total Ho□r□(hr□)	Pro□lem Time Ho□r□(hr□)
24.00	
Pro□lem Time (□)	C□m Pro□lem Time (□)
Day□LTI (day□)	Day□RI (day□)

Personnel Log

Company	Co□nt	Tot Time (hr□)
Na□or□Drillin□Limited	15	180.00
Mi Swaco	1	12.00
Apex Oilfield Service□ 2000 Inc.	1	12.00
□NEW VENDOR□	1	12.00
R G Mallett Oilfield Enterpri□e□	1	12.00
Mc□rath Re□o□rce Con□□ltin□Ltd.	1	12.00
Hori□on North Camp□□ Cat	5	60.00
□NEW VENDOR□	2	24.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	2	24.00
Continental La□oratorie□	2	24.00
H□e Inte□rated Ltd.	1	12.00
Frontier	1	12.00
Phoenix Technolo□y Service□LP	3	36.00
Bi□ Ea□le Limited Partner□hip	1	12.00
		0.00

Safety Check Summary

Type	La□t Date	Next Date
Safety Meetin□	2/24/2012	2/25/2012

Rigs

Contractor	Ri□ N□m□er
Na□or□Drillin□	23
Ri□ S□pervi□or	Phone Mo□ile
Troy Pre□□□	

Ri□ Relea□e Date: 3/10/2012 23:59

Mud Pumps

1, GARDNER DENVER, PZ8

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	203.0
Liner Si□e (mm)	Vol/Stk OR (m□/□tk)	
152.0	0.011	
Pre□(kPa)	Slow Spd	Stroke□(□p... / Eff (□)
		0

2, CONTINENTAL EMSCO, F800

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	229.0
Liner Si□e (mm)	Vol/Stk OR (m□/□tk)	
152.0	0.013	
Pre□(kPa)	Slow Spd	Stroke□(□p... / Eff (□)
		100

Mud Additive Amounts

De□cription	Co□t (/□nit)	Con□□med
VERSACOAT HF	900.76	1.0
VERSAMUL	862.55	1.0
TRUVIS	162.47	5.0
INVERT	2,172.51	46.03

Survey Data

MD (mKB)	Incl (°)	A□m (°)	TVD (mKB)
591.98	0.70	70.80	591.83

Report Printed: 6/4/2012

Well Name: HUSKY LITTLE BEAR H-64

Time Log

Start Time	Dur (hr)	Cum Dur (hr)	End Time	Activity Code	Activity Desc.	Prod/U...	Problem Time (hr)	Problem Ref	Comment
14:00	0.50	14.50	14:30	14	NIPPLE UP B.O.P.				NIPPLE UP BOP (INSTALL CATCH CAN AND KILL LINE HOSE)
14:30	0.25	14.75	14:45	21	SAFETY MEETING				PRE-JOB SAFETY PRIOR TO PICK UP DIR TOOLS
14:45	2.75	17.50	17:30	20	DIR. WORK				PICK UP,MAKE UP AND HANDLE DIRECTIONAL TOOLS
17:30	1.50	19.00	19:00	6	TRIPS				RUN IN HOLE
19:00	0.25	19.25	19:15	21	SAFETY MEETING				PRE TOUR SAFETY MEETING AND CREW; CHANGE HAND OVER
19:15	1.00	20.25	20:15	6	TRIPS				TRIP IN HOLE REMOVE BAILS AND ELVATORS
20:15	0.25	20.50	20:30	21	SAFETY MEETING				PRE JOB SAFETY MEETING PRIOR TO SLIP AN CUT DRILL LINE
20:30	0.25	20.75	20:45	9	CUT OFF DRILLING LINE				SLIP/CUT DRILLING LINE
20:45	1.75	22.50	22:30	5	COND MUD & CIRC				TAG CEMENT @ 494M , DISPLACE TO OIL BASE
22:30	0.25	22.75	22:45	2	DRILL				DRILL CEMENT/DRILL OUT CEMENT/DRILL FLOAT&SHOE ,DRILL GOOD CEMT
22:45	0.25	23.00	23:00	21	SAFETY MEETING				DRILLS/BOP, ETC.
23:00	0.25	23.25	23:15	2C	Drill Cement/Drill Out Cement/ Drill Float & Shoe				DRILL CEMENT/DRILL OUT CEMENT/DRILL FLOAT&SHOE
23:15	0.50	23.75	23:45	2	DRILL				DRILL 200MM FR 510M TO 513 M ,PRESSER TESTING POINT
23:45	0.25	24.00	00:00	21	SAFETY MEETING				SAFETY MEETING WITH PRESSER TESTER

Survey Data

MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)
610.41	0.50	47.90	610.26
637.80	0.70	259.70	637.65
666.16	0.50	307.50	666.01
694.31	0.70	12.50	694.16

Last 5 Formations

Formation Name	Prod Top (TVD) (mKB)	Drill Top MD (mKB)

Hole Size (mm)

Max Nominal OD (mm)
244.5

Mud Checks

Type	Time	Depth (mKB)	Density (kg/m³)	Visc (s/L)	Plastic Visc (cp)	Yield Point (Pa)
Oil Base	22:00		1200.0	49		

Gel 10 sec (Pa)	Gel 10 min (Pa)	Gel 30 min (Pa)	Filtrate (mL/30min)	Filter Cake (mm)	pH	Solid (%)

MBT (kg/m³)	Percent Oil (%)	Percent Water (%)	Chloride (mg/L)	Calcium (mg/L)	Potassium (mg/L)	Electric Stab (V)

Whole Mud Added (m³)	Mud Lost to Hole (m³)	Mud Lost to Surface (m³)	Reserve Mud Volume (m³)	Active Mud Volume (m³)

Drill Strings

BHA #3, Drilling Assembly

Bit R...	Drill Bit	Make	IADC Bit Dull	TFA (incl Noz) (mm²)
3	222.2mm, Mi516, PD1380	SMITH	-------	847

Nozzle (mm)	String Length (m)	String Wt (daN)	BHA ROP (m...
12.7/12.7/12.7/9.5/9.5/9.5/12.7/12.7	1,170.00		17.5

Drill String Components

Item Description	Jts	OD (mm)	ID (mm)	Len (m)	Top Thread
Kelly	1	168.0	68.0	9.56	
Drill pipe - Single	1	101.6	70.0	9.26	
Drill pipe - Stand	54	101.6	70.0	1,003.76	
HWDP(4.0 IN)	8	101.6	68.0	72.64	
X/O	1	165.0	73.0	0.71	
DC (6.25 IN)	2	165.0	58.0	18.97	
PARS-HYD/MECH	1	158.0	71.0	6.10	
DC (6.25 IN)	2	165.0	58.0	18.96	
Pump out sub	1	157.0	58.0	1.02	
MONEL	2	167.0	73.0	18.89	
UBHO	1	164.0	73.0	0.92	
MOTOR HS	1	166.0	58.0	8.97	

Drilling Parameters

Wellbore	Start (mKB)	Depth End (mKB)	Cum Depth (m)	Drillin Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	Q (flow) (m³/min)
Original Hole, 300H6465...	510.00	513.00	3.00	0.50	0.50	6.0	1.200

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin Torque	Off Btm T
2,000	30						

Q (ging) (m³/min)	T (In) (°C)	P (BH Ann) (kPa)	T (bh) (°C)	P(Surf Ann) (kPa)	T (surf ann) (°C)	Q (lin rtrn) (m³/...	Q (gas retrn) (m³/...

Kick/Lost Circ

Occur Date	Occur Depth (mKB)	Control Date	Control Depth (mKB)	Incident Type

Comment

Casing Strings

Casing Description	Run Date	Set Depth (mKB)

Comment

Well Name: HUSKY LITTLE BEAR H-64

Casing Components

Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...

Daily Drilling - Detail (legal size)

Report Start Date: 2/25/2012
Report #: 9, DFS: 6.52
Depth Progress: 416.00

Well Name: HUSKY LITTLE BEAR H-64

Licenced UWI	Surface Legal Location	Licence No.	State/Province
300H64650012600	300H64650012600	462	N.W.T

Sour Class	ERP Required	Lahee Classification	Business Unit
Sweet	No	TH (C)	Canada Frontier - Exploration

Initial Ground Elevation (m)	Cut/Fill (m)	Ground Elv. (m)	KB Elevation (m)	KB to Gnd (m)
178.00	0.0	178.00	183.20	5.20

KB-Casing Flange Distance (m)	KB-Tubing Head Distance (m)	Total Depth All (TVD) (mKB)
5.47	5.00	Original Hole - 1340.8

Primary Wellbore Affected: Original Hole, 300H64650012600

Weather	Temperature (°C)	Road Condition	Hole Condition
Clear	-31	Fair	Good

Operation at Report Time: Drill 222mm Main Hole w/Directional Tool.

Operation Next Report Period: Drill 222mm Main Hole to core point, Circ Bttms Up, Wiper trip to csg shoe, Circulate Bttms Up, POOH to/P/U Core Barrel.

Operation 06:00: Drill 222mm Main Hole @ 1029m.

Operation Summary: Performed a FIT test to 21.5 kpa/m. Drilled ahead from 513m to 541m. Serviced the rig and functioned the pipe rams. Continued to drill ahead to 625m. Held a crew hand over and a safety meeting. Drilled ahead from 625m to 678m with the directional tools and gamma. Held a BOP drill and a man down drill. Drilled ahead from 678m to 709m with the directional tools and gamma. Drilled 222mm Hole F/709m to/929m with directional tools and gamma.

Remark:
No Accidents, Incidents or Enviromental Concerns.

Directions to the location. From Norman Wells, Take the winter road South for approx 34.4km. Turn right and go through the security. Continue on the Husky Winter Rd to the Husky Camp Site. Continue on the Husky Winter Rd to km 44 Turn left and continue to km 46. Keep left and go to location at km 47. All roads are RADIO CONTROLLED.

Tank Farm delivered for Little Bear H-64
Base Oil Delivered today = 0m3, Total at Tank Farm = 26m3.
Invert Delivered today = 30m3, Total at Tank Farm = 195m3

Daily invert loss: 3.5m3
Total invert loss: 11.5m3

Daily Contacts

Type	Contact Name	Title	Mobile
Office	Kim Richardson	DR Superintendent	403-542-1059
Office	Goly Zilaki	DR Engr	403-462-8021
Office	Sandeep Randhawa	DR Engr	403-519-5660
Office	Darren Brown	Construction Super	
Well Site Supervisor	Cal Conklin	DR Field Super	403-502-3387
Well Site Supervisor	Woody Periard	DR Field Super	403-350-6027
Well Site Supervisor	Dan Heidorfer	DR Field Super	780-446-5160
Rig Manager	Troy Prest	Rig Manager	

Time Log

Start Time	Dur (hr)	Cum Dur (hr)	End Time	Activity Code	Activity Desc.	Prob/U...	Problem Time (hr)	Problem Ref #	Comment
00:00	0.75	0.75	00:45	12	RUN CASING AND CEMENT				PRESSURE TEST CSG/SHOE
00:45	1.50	2.25	02:15	2	DRILL				DRILL 222MM HOLE FR 513M TO 541M
02:15	0.25	2.50	02:30	7	RIG SERVICE				RIG SERVICE F/T PIPE RAMS 3 SECOND C/O
02:30	4.50	7.00	07:00	2	DRILL				DRILL 222MM FR 541M TO 625M
07:00	0.25	7.25	07:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING WITH OTHER CREW
07:15	2.75	10.00	10:00	2	DRILL				DRILL 222MM HOLE FR 625M-TO- 678M
10:00	0.25	10.25	10:15	21	SAFETY MEETING				DRILLS/BOP, ,AND MAN DOWN, EXSCAPE ROUTES ,BREIFING AREAS
10:15	0.75	11.00	11:00	2	DRILL				DRILL 222MM HOLE FR 678M-T0-709M
11:00	1.00	12.00	12:00	20	DIR. WORK				ACCUM DIRECTIONAL SURVEYS AND CONNECTION TIME
12:00	6.25	18.25	18:15	2	DRILL				DRILL 222MM HOLE FR 709M-TO-820M
18:15	0.25	18.50	18:30	7	RIG SERVICE				RIG SERVICE
18:30	0.50	19.00	19:00	2	DRILL				DRILL 222MM HOLE FR 820M TO 829M
19:00	0.25	19.25	19:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING
19:15	2.75	22.00	22:00	2	DRILL				DRILL 222MM HOLE FR 829M TO 929M
22:00	2.00	24.00	00:00	20	DIR. WORK				DIRECTIONAL SURVEYS , SYNC GAMMA , CONNECTIONS

Cost Object Number	Orig AFE Sup Amt
US-51822-EX-02-DR-ID	11,529,266.00

Primary Job Type	
Initial Drillin	

Start Date	End Date
2/17/2012	3/10/2012
Final Status: Drilled - Cased	Spud Date: 2/19/2012 11:30
Daily Cost Total: 118,292.65	Cum Cost To Date: 1,958,043.48
Daily Mud Cost: 6,529.65	Mud Additive Cost To Date: 117,832.41
Depth Start (mKB): 513.00	Depth End (mKB): 929.00

Last Casing Strin: Surface, 510.00mKB

Depth Progress (m): 416.00

Depth Start (TVD) (mKB)	Depth End (TVD) (mKB)
512.86	928.84
Target Formation: Canol	Est Total Depth (mKB): 1,412.00
Personnel Total Hours (hr): 504.00	Cum Per Tot Hr (hr): 4,944.00
Time Log Total Hours (hr): 24.00	Problem Time Hours (hr):
Problem Time ():	Cum Problem Time ():
Day LTI (day):	Day RI (day):

Personnel Log

Company	Count	Tot Time (hr)
Nabors Drilling Limited	15	180.00
Mi Swaco	1	12.00
Apex Oilfield Service 2000 Inc.	1	12.00
R G Mallett Oilfield Enterprise	1	12.00
Heidorfer Consulting Ltd.	1	12.00
NEW VENDOR	1	12.00
McGrath Resource Consulting Ltd.	1	12.00
Horizon North Camp Cat	5	60.00
NEW VENDOR	2	24.00
NEW VENDOR	1	12.00
NEW VENDOR	1	12.00
NEW VENDOR	2	24.00
Continental Laboratories	2	24.00
Hoe Integrated Ltd.	1	12.00
Frontier	1	12.00
Phoenix Technology Service LP	3	36.00
Big Eagle Limited Partnership	1	12.00
Baker Hughes	2	24.00

Safety Check Summary

Type	Last Date	Next Date
Safety Meetin	2/25/2012	2/26/2012

Rigs

Contractor	Rig Number
Nabors Drillin	23
Rig Supervisor: Troy Prest	Phone Mobile
Rig Release Date: 3/10/2012 23:59	

Mud Pumps

1, GARDNER DENVER, PZ8

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	203.0
Liner Size (mm): 152.0	Vol/Stk OR (m³/stk): 0.011	
Press (kPa)	Slow Spd	Strokes (spm)	Eff (%)
		0	

2, CONTINENTAL EMSCO, F800

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	229.0
Liner Size (mm): 152.0	Vol/Stk OR (m³/stk): 0.013	
Press (kPa)	Slow Spd	Strokes (spm)	Eff (%)
1,900	Yes	57	95

Mud Additive Amounts

Description	Cost (/unit)	Consumed
VERSAMUL	862.55	1.0
LIME	12.13	10.0
OPTISEAL III	70.20	79.0

Report Printed: 6/4/2012

Well Name: HUSKY LITTLE BEAR H-64

Mud Checks

Type	Time	Depth (mKB)	Den□ity (k□/m□)	Vi□ (□/L)	Pla□tic Vi□c (cp)	Yield Point (Pa)
Invert	12:30	713.00	1200.0	48	16.0	3.000

Gel 10 □ec (Pa)	Gel 10 min (Pa)	Gel 30 min (Pa)	Filtrate (mL/30min)	Filter Cake (mm)	pH	Solid□ (%)
3.000	5.500	8.500				12.7

MBT (k□/m□)	Percent Oil (%)	Percent Water (%)	Chloride□ (m□/L)	Calci□m (m□/L)	Pota□□i□m (m□/L)	Electric Sta□ (V)
	81.0	19.0	247,112.007			929.0

Whole M□d Added (m□)	M□d Lo□t to Hole (m³)	M□d Lo□t to S□rface (m□)	Re□erve M□d Vol□me (m□)	Active M□d Vol□me (m□)
10.00		3.50	151.50	66.20

Drill Strings

BHA #3, Drilling Assembly

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)
3	222.2mm, Mi516, □D1380	SMITH	-------	847

No□□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...
12.7/12.7/12.7/9.5/9.5/9.5/12.7/12.7	1,170.00		17.5

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread
Kelly	1	168.0	68.0	9.56	
Drill pipe - Sin□le□	1	101.6	70.0	9.26	
Drill pipe - Stand□	54	101.6	70.0	1,003.76	
HWDP(4.0 IN)	8	101.6	68.0	72.64	
X/O	1	165.0	73.0	0.71	
DC (6.25 IN)	2	165.0	58.0	18.97	
□ARS-HYD/MECH	1	158.0	71.0	6.10	
DC (6.25 IN)	2	165.0	58.0	18.96	
P□mp o□t sub	1	157.0	58.0	1.02	
MONEL	2	167.0	73.0	18.89	
UBHO	1	164.0	73.0	0.92	
MOTOR HS	1	166.0	58.0	8.97	

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	Q (flow) (m□/min)
Ori□inal Hole, 300H6465...	513.00	929.00	419.00	19.00	19.50	21.9	1.450

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
2,000	40	9,500	24,000	25,000	23,000	3,800.0	560.0

Q (g in) (m□/min)	T (In) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	Q (li□rtrn) (m□/...	Q (g ret□rn) (m□/...

Kick/Lost Circ

Occ□r Date	Occ□r Depth (mKB)	Control Date	Control Depth (mKB)	Incident Type

Comment

Casing Strings

Ca□in□ De□cription	R□n Date	Set Depth (mKB)

Comment

Casing Components

Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...

Survey Data

MD (mKB)	Incl (°)	A□m (°)	TVD (mKB)
805.78	0.90	39.00	805.63
833.69	0.30	136.30	833.53
861.30	0.50	93.40	861.14
889.17	0.20	220.40	889.01
916.90	0.50	67.80	916.74

Last 5 Formations

Formation Name	Pro□ Top (TVD) (mKB)	Drill Top MD (mKB)

Hole Size (mm)

Max Nominal OD (mm)
244.5

Husky Energy

Daily Drilling - Detail (legal size)

Report Start Date: 2/26/2012
Report #: 10, DFS: 7.52
Depth Progress: 225.00

Well Name: HUSKY LITTLE BEAR H-64

Licen□ed UWI	S□rface Le□al Location	Licen□e No.	State/Province
300H64650012600	300H64650012600	462	N.W.T

So□r Cla□□	ERP Re□□ired	Lahee Cla□□ification	B□□ine□□Unit
Sweet	No	TH (C)	Canada Frontier - Exploration

Initial Gro□nd Elevation (m)	C□t/Fill (m)	Gro□nd Elv. (m)	KB Elevation (m)	KB to Gnd (m)
178.00	0.0	178.00	183.20	5.20

KB-Ca□in□Flan□e Di□tance (m)	KB-T□□in□Head Di□tance (m)	Total Depth All (TVD) (mKB)
5.47	5.00	Ori□inal Hole - 1340.8

Primary Well□ore Affected
Ori□inal Hole, 300H64650012600

Weather	Temperat□re (°C)	Road Condition	Hole Condition
Clear	-28	Fair	Good

Operation□at Report Time	Operation□Next Report Period
Drill 222mm Main Hole w/Directional Tool□.	Drill 222mm Main Hole to core point □ 1170m, Circ □ttm□ □p, Wiper trip to c□□ □hoe, Circ□late □ttm□ □p, POOH to/P/U Core Barrel□ □ RIH and c□t core □1.

Operation□□ 06:00	Operation□S□mmary
Fill pipe and circ□late	Drilled 222mm main hole with directional tool□and □amma from 929m to 975m. Serviced the ri□and f□nctioned the pipe ram□. Drilled ahead to 1051m with □□rvey□. Held a crew handover and a □afety meetin□. Drilled ahead from 1051m to 1090m. Circ□lated □p a □ample and waited on order□a□per □eolo□i□t. Drilled ahead from 1090m to 1105m. Circ□lated □p □ottom hole □ample and waited on order□a□per the □eolo□i□t. Drilled ahead from 1105m to 1135m. Circ□lated □ottom□□p □ample and waited on order□a□per the □eolo□i□t. Drilled ahead from 1135m to 1150m with no rop re□triction. Circ□late □ottom□hole □ample for □eolo□i□t and waited on order□from □eolo□i□t. Drilled ahead from 1150m to 1154m. Held □afety crew chan□e meetin□□ with □oth crew□, Ri□ Mana□er□□H□□ky Rep□.

Remark□
No Accident□, Incident□or Enviromental Concern□.

Direction□to the location. From Norman Well□, Take the winter road □o□th for approx 34.4km. T□rn ri□ht and □o thro□□h the □ec□rity. Contin□e on the H□□ky Winter Rd to the H□□ky Camp Site. Contin□e on the H□□ky Winter Rd to km 44 T□rn left and contin□e to km 46. Keep left and □o to location at km 47. All road□are RADIO CONTROLLED.

Tank Farm delivered for Little Bear H-64
Ba□e Oil Delivered today □ 0m3, Total at Tank Farm □ 26m3.
Invert Delivered today □ 0m3, Total at Tank Farm □195m3

Daily invert lo□□e□: 8.7m3
Total invert lo□□e□: 20.2m3

Daily Contacts

Type	Contact Name	Title	Mo□ile
Office	Kim Richard□on	DR S□perintendent	403-542-1059
Office	Goly Zila□i	DR En□	403-462-8021
Office	Sandeep Randhawa	DR En□	403-519-5660
Office	Darren Brown	Con□tr□ction S□per	
Well Site S□pervi□or	Cal Conklin	DR Field S□per	403-502-3387
Well Site S□pervi□or	Woody Periard	DR Field S□per	403-350-6027
Well Site S□pervi□or	Dan He□□dorfer	DR Field S□per	780-446-5160
Ri□ Mana□er	Troy Pre□□□	Ri□ Mana□er	

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
00:00	2.75	2.75	02:45	2	DRILL				DRILL 222MM HOLE FR 929M TO 975M
02:45	0.25	3.00	03:00	7	RIG SERVICE				RIG SERVICE 3 SECONDS C/O PIPE RAMS
03:00	2.75	5.75	05:45	2	DRILL				DRILL 222MM HOLE FR 975M TO 1051M
05:45	1.25	7.00	07:00	20	DIR. WORK				DIRECTIONAL SURVEYS, SYNC GAMMA, CONNECTIONS
07:00	0.25	7.25	07:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING WITH OTHER CREW
07:15	4.00	11.25	11:15	2	DRILL				DRILL 222MM HOLE FR 1051M TO 1083M
11:15	0.75	12.00	12:00	20	DIR. WORK				ACCUM DIRECTIONAL SURVEYS AND CONNECTION TIME
12:00	0.75	12.75	12:45	2	DRILL				DRILL 222MM HOLE FR 1083M-TO-1090M
12:45	1.50	14.25	14:15	23	WAITING ON				WAIT ON ORDERS AS PER GEO
14:15	2.00	16.25	16:15	2	DRILL				DRILL 222MM HOLE FR 1090M-TO-1105M
16:15	1.25	17.50	17:30	23	WAITING ON				W/O ORDERS AS PER GEO
17:30	1.00	18.50	18:30	2	DRILL				DRILL 222MM HOLE FR 1105M-TO- 1116M
18:30	0.50	19.00	19:00	20	DIR. WORK				DIRECTIONAL SURVEYS , SYNC GAMMA , CONNECTIONS
19:00	0.25	19.25	19:15	21	SAFETY MEETING				CREW CHANGE HAND OVER AND PRE TOUR SAFETY MEETING
19:15	3.75	23.00	23:00	2	DRILL				DRILL 222MM HOLE FR 1116M TO 1150M
23:00	0.75	23.75	23:45	23	WAITING ON				W/O OREDERS AS PER GEO
23:45	0.25	24.00	00:00	2	DRILL				DRILL 22MM HOLE FR 1150M TO 1154M

Co□t O□ect N□m□er	Ori□ AFE S□p Am
US-51822-EX-02-DR-ID	11,529,266.00

Primary □o□Type	
Initial Drillin□	
Start Date	End Date
2/17/2012	3/10/2012
Final Stat□□	Sp□d Date
Drilled □ Ca□ed	2/19/2012 11:30
Daily Co□t Total	C□m Co□t To Date
116,013.24	2,074,056.72
Daily M□d Co□t	M□d Additive Co□t To Date
775.24	118,607.65
Depth Start (mKB)	Depth End (mKB)
929.00	1,154.00
La□t Ca□in□Strin□	
S□rface, 510.00mKB	
Depth Pro□re□□(m)	
225.00	
Depth Start (TVD) (mKB)	Depth End (TVD) (mKB)
928.84	1,153.80
Tar□et Formation	E□t Total Depth (mKB)
Canol	1,412.00
Per□onnel Total Ho□r□(hr□)	C□m Per□Tot Hr (hr□)
504.00	5,448.00
Time Lo□Total Ho□r□(hr□)	Pro□lem Time Ho□r□(hr□)
24.00	
Pro□lem Time (□)	C□m Pro□lem Time (□)
Day□LTI (day□)	Day□RI (day□)

Personnel Log

Company	Co□nt	Tot Time (hr□)
Na□or□Drillin□Limited	15	180.00
Mi Swaco	1	12.00
Apex Oilfield Service□ 2000 Inc.	1	12.00
R G Mallett Oilfield Enterpri□e□	1	12.00
He□□dorfer Con□□ltin□ Ltd.	1	12.00
Mc□rath Re□o□rce Con□□ltin□Ltd.	1	12.00
Hori□on North Camp□□ Cat	5	60.00
□NEW VENDOR□	2	24.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	2	24.00
Continental La□oratorie□	2	24.00
H□e Inte□rated Ltd.	1	12.00
Frontier	1	12.00
Phoenix Technolo□y Service□LP	3	36.00
Bi□ Ea□le Limited Partner□hip		0.00
Baker H□□he□	2	24.00
Baker Atla□	2	24.00

Safety Check Summary

Type	La□t Date	Next Date
Safety Meetin□	2/26/2012	2/27/2012

Rigs

Contractor	Ri□ N□m□er
Na□or□Drillin□	23
Ri□ S□pervi□or	Phone Mo□ile
Troy Pre□□□	
Ri□ Relea□e Date	
3/10/2012 23:59	

Mud Pumps

 # 1, GARDNER DENVER, PZ8

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	203.0
Liner Si□e (mm)		Vol/Stk OR (m□/□tk)
152.0		0.011
Pre□(kPa)	Slow Spd	Stroke□(□p...	Eff (□)
		0	

 # 2, CONTINENTAL EMSCO, F800

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	229.0
Liner Si□e (mm)		Vol/Stk OR (m□/□tk)
152.0		0.013
Pre□(kPa)	Slow Spd	Stroke□(□p...	Eff (□)
1,100	Ye□	57	95

Mud Additive Amounts

De□cription	Co□t (/□nit)	Con□med
LIME	12.13	10.0
FED WATE (BARITE)	15.57	42.0

Survey Data

MD (mKB)	Incl (°)	A□m (°)	TVD (mKB)
1,010.01	0.20	82.40	1,009.83

Report Printed: 6/4/2012

Husky Energy

Daily Drilling - Detail (legal size)

Report Start Date: 2/26/2012
Report #: 10, DFS: 7.52
Depth Progress: 225.00

Well Name: HUSKY LITTLE BEAR H-64

Mud Checks

Type	Time	Depth (mKB)	Density (kg/m³)	Visc (s/L)	Plastic Visc (cp)	Yield Point (Pa)
Invert	06:15		1205.0	48	18.0	3.500

Gel 10 sec (Pa)	Gel 10 min (Pa)	Gel 30 min (Pa)	Filtrate (mL/30min)	Filter Cake (mm)	pH	Solid (%)
3.500	8.000	11.000				13.2

MBT (kg/m³)	Percent Oil (%)	Percent Water (%)	Chloride (mg/L)	Calcium (mg/L)	Potassium (mg/L)	Electric Stab (V)
	81.0	19.0	242,164.001			927.0

Whole Mud Added (m³)	Mud Lost to Hole (m³)	Mud Lost to Surface (m³)	Reserve Mud Volume (m³)	Active Mud Volume (m³)
10.00	1.60	2.40	129.80	74.70

Drill Strings

BHA #3, Drilling Assembly

Bit R...	Drill Bit	Make	IADC Bit Dull	TFA (incl Noz) (mm²)
3	222.2mm, Mi516, PD1380	SMITH	-------	847

Nozzle (mm)	String Length (m)	String Wt (daN)	BHA ROP (m...
12.7/12.7/12.7/9.5/9.5/9.5/12.7/12.7	1,170.00		17.5

Drill String Components

Item Description	Jts	OD (mm)	ID (mm)	Len (m)	Top Thread
Kelly	1	168.0	68.0	9.56	
Drill pipe - Single	1	101.6	70.0	9.26	
Drill pipe - Stand	54	101.6	70.0	1,003.76	
HWDP(4.0 IN)	8	101.6	68.0	72.64	
X/O	1	165.0	73.0	0.71	
DC (6.25 IN)	2	165.0	58.0	18.97	
PARS-HYD/MECH	1	158.0	71.0	6.10	
DC (6.25 IN)	2	165.0	58.0	18.96	
Pump out sub	1	157.0	58.0	1.02	
MONEL	2	167.0	73.0	18.89	
UBHO	1	164.0	73.0	0.92	
MOTOR HS	1	166.0	58.0	8.97	

Drilling Parameters

Wellbore	Start (mKB)	Depth End (mKB)	Cum Depth (m)	Drillin Time (hr)	Cum Drill Time (...	Int ROP (m/hr)	(flow) (m³/min)
Original Hole, 300H6465...	929.00	1,154.00	644.00	17.25	36.75	13.0	1.450

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin Torque	Off Btm T
1,000	45	9,500	27,000	31,000	25,000	2,000.0	580.0

(in) (m³/min)	T (In) (°C)	P (BH Ann) (kPa)	T (th) (°C)	P(Surf Ann) (kPa)	T (surf ann) (°C)	(in rtrn) (m³/...	(ret rn) (m³/...

Kick/Lost Circ

Occur Date	Occur Depth (mKB)	Control Date	Control Depth (mKB)	Incident Type

Comment

Casing Strings

Casin Description	Run Date	Set Depth (mKB)

Comment

Casing Components

Item Description	Make	OD (mm)	Grade	Wt (kg/m)	Joint	Cum Len (m)	Top (mKB)	TopConn T...

Survey Data

MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)
1,037.78	0.90	62.20	1,037.60
1,065.84	0.40	61.30	1,065.65
1,093.29	0.40	102.80	1,093.10
1,120.96	1.00	99.20	1,120.77

Last 5 Formations

Formation Name	Prog Top (TVD) (mKB)	Drill Top MD (mKB)

Hole Size (mm)

Max Nominal OD (mm)
244.5

Report Printed: 6/4/2012

Husky Energy — Daily Drilling - Detail (legal size)

Report Start Date: 2/27/2012
Report #: 11, DFS: 8.52
Depth Progress: 16.00

Well Name: HUSKY LITTLE BEAR H-64

Licensed UWI	Surface Legal Location	Licence No.	State/Province
300H64650012600	300H64650012600	462	N.W.T

Sour Class	ERP Required	Lahee Classification	Business Unit
Sweet	No	TH (C)	Canada Frontier - Exploration

Initial Ground Elevation (m)	Cut/Fill (m)	Ground Elv. (m)	KB Elevation (m)	KB to Gnd (m)
178.00	0.0	178.00	183.20	5.20

KB-Casing Flange Distance (m)	KB-Tubing Head Distance (m)	Total Depth All (TVD) (mKB)
5.47	5.00	Original Hole - 1340.8

Primary Wellbore Affected: Original Hole, 300H64650012600

Weather	Temperature (°C)	Road Condition	Hole Condition
Light Snow	-25	Fair	Good

Operation at Report Time	Operation Next Report Period
RIH W/Core Barrel run #1.	RIH W/Core Barrel, Wash to Bottom, Circulate Btm Up drop Ball, Cut 54m of core, Circulate clean hole, POOH Recover core, Make Up core Barrel run #2.

Operation 06:00	Operation Summary
Cut Core #1 @ 1201m.	Drilled 222mm main hole from 1154m to 1157m with directional tool. Waited on orders as per Geology. Drilled ahead to 1170m. Circulated sample up as per Geology. Circulated and conditioned the hole and mud prior to wiper trip. Installed elevator, bail, pumped a weighted pill and wiper tripped to the csg shoe @ 510m, Flow check and ran back in the hole. Conditioned the hole prior to Pulling out of the hole for core #1. Held a crew hand over and a safety meeting. Pulled out of the hole and layed down the MWD tool and the mud motor. Serviced the rig and functioned the blind rams. Held a safety meeting with rig crew & core hands & Husky rep prior to make up 54m of core #1. Held safety crew change meeting with both crews, Rig Manager & Husky Rep. Picked up core #1 and run in the hole.

Remark
No Accident, Incident or Enviromental Concern.

Direction to the location. From Norman Well, Take the winter road south for approx 34.4km. Turn right and go through the security. Continue on the Husky Winter Rd to the Husky Camp Site. Continue on the Husky Winter Rd to km 44 Turn left and continue to km 46. Keep left and go to location at km 47. All roads are RADIO CONTROLLED.

Tank Farm delivered for Little Bear H-64
Base Oil Delivered today @ 0m3, Total at Tank Farm @ 26m3.
Invert Delivered today @ 0m3, Total at Tank Farm @ 104m3

Daily invert loose: 4.57m3
Total invert loose: 24.77m3

Daily Contacts

Type	Contact Name	Title	Mobile
Office	Kim Richardson	DR Superintendent	403-542-1059
Office	Goly Zilaki	DR Eng	403-462-8021
Office	Sandeep Randhawa	DR Eng	403-519-5660
Office	Darren Brown	Construction Super	
Well Site Supervisor	Cal Conklin	DR Field Sper	403-502-3387
Well Site Supervisor	Woody Periard	DR Field Sper	403-350-6027
Well Site Supervisor	Dan Heidorfer	DR Field Sper	780-446-5160
Rig Manager	Troy Pree	Rig Manager	

Time Log

Start Time	Dur (hr)	Cum Dur (hr)	End Time	Activity Code	Activity Desc.	Prob/U...	Problem Time (hr)	Problem Ref #	Comment
00:00	0.25	0.25	00:15	2	DRILL				DRILL 222MM HOLE FR 1154M TO 1157M
00:15	0.50	0.75	00:45	23	WAITING ON				W/O ORDERS PER GEO
00:45	0.75	1.50	01:30	2	DRILL				DRILL 222MM HOLE FR 1157M TO 1170M
01:30	0.25	1.75	01:45	23	WAITING ON				W/O ORDERS PER GEO
01:45	1.25	3.00	03:00	5	COND MUD @ CIRC				CONDITION MUD @ CIRCULATE
03:00	1.75	4.75	04:45	6	TRIPS				INSTALL BAILS AND ELEVATORS , TRIP OUT OF HOLE , WIPER TRIP , FLOW CHECKS @ 1160M, 1135M, 861M, 503M
04:45	1.25	6.00	06:00	6	TRIPS				TRIP IN HOLE FILL ON BOTTOM OF HOLE
06:00	1.00	7.00	07:00	5	COND MUD @ CIRC				CONDITION MUD @ CIRCULATE TO PULL OUT TO PICK UP CORE BARRELS
07:00	0.25	7.25	07:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING W/ RIG CREW & RM @ HUSKY REP
07:15	0.50	7.75	07:45	5	COND MUD @ CIRC				CIRCULATE AND CONDITION TO PULL OUT LAY DOWN TOOLS ,MIX AND PUMP PILL
07:45	4.25	12.00	12:00	6	TRIPS				TRIP OUT OF HOLE, LAY DOWN TOOLS , FLOW CHECKS @ 1160M,1081M, 528M,168M,OUT OF HOLE IN TALLY STRAP 1170.44/STEEL LINE STRAP 1170.88 DIFF.44CM HOLE FILL VOLUMES CAL.4.12M3/MEASURED 5.61M3/DIFF 1.49M3 TRIPPED OUT 20M/MIN

Cost Object Number	Orig AFE Sup Amt
US-51822-EX-02-DR-ID	11,529,266.00

Primary Job Type
Initial Drilling

Start Date	End Date
2/17/2012	3/10/2012
Final Status: Drilled & Cased	Spud Date: 2/19/2012 11:30
Daily Cost Total: 230,813.24	Cum Cost To Date: 2,304,869.96
Daily Mud Cost: 775.24	Mud Additive Cost To Date: 119,382.89
Depth Start (mKB): 1,154.00	Depth End (mKB): 1,170.00
Last Casing String: Surface, 510.00mKB	
Depth Progress (m): 16.00	
Depth Start (TVD) (mKB): 1,153.80	Depth End (TVD) (mKB): 1,169.80
Target Formation: Canol	Est Total Depth (mKB): 1,412.00
Personnel Total Hours (hr): 496.00	Cum Per Tot Hr (hr): 5,944.00
Time Log Total Hours (hr): 24.00	Problem Time Hours (hr):
Problem Time (%):	Cum Problem Time (%):
Days LTI (days):	Days RI (days):

Personnel Log

Company	Count	Tot Time (hr)
Nabors Drilling Limited	15	180.00
Mi Swaco	1	12.00
Apex Oilfield Service 2000 Inc.	1	12.00
R G Mallett Oilfield Enterprise	1	12.00
Heidorfer Consulting Ltd.	1	12.00
McGrath Resource Consulting Ltd.	1	12.00
Horizon North Camp Cat	5	60.00
NEW VENDOR	2	24.00
NEW VENDOR	1	12.00
NEW VENDOR	1	12.00
NEW VENDOR	2	24.00
Continental Laboratories	2	24.00
Hse Integrated Ltd.	1	12.00
Frontier	1	12.00
Phoenix Technology Service LP	3	36.00
Baker Hughes	2	24.00
Baker Atlas	2	16.00

Safety Check Summary

Type	Last Date	Next Date
Safety Meeting	2/27/2012	2/28/2012

Rigs

Contractor	Rig Number
Nabors Drilling	23
Rig Supervisor: Troy Pree	Phone Mobile
Rig Release Date: 3/10/2012 23:59	

Mud Pumps

 # 1, GARDNER DENVER, PZ8

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	203.0

Liner Size (mm)	Vol/Stk OR (m³/stk)
152.0	0.011

Press (kPa)	Slow Spd	Strokes (spm)	Eff (%)
		0	

 # 2, CONTINENTAL EMSCO, F800

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	229.0

Liner Size (mm)	Vol/Stk OR (m³/stk)
152.0	0.013

Press (kPa)	Slow Spd	Strokes (spm)	Eff (%)
1,100	Yes	57	95

Mud Additive Amounts

Description	Cost (/unit)	Consumed
LIME	12.13	10.0
FED WATE (BARITE)	15.57	42.0

Survey Data

MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)
1,148.83	1.40	89.70	1,148.64
1,155.18	1.30	91.80	1,154.98

Report Printed: 6/4/2012

Well Name: HUSKY LITTLE BEAR H-64

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
12:00	0.25	12.25	12:15	21	SAFETY MEETING				SAFETY MEETING WITH DIR PRIOR LAYING DOWN TOOLS
12:15	1.50	13.75	13:45	20	DIR. WORK				HANDLE DIRECTIONAL TOOLS PULL MWD, RACK MONELS, DRAIN MOTOR AND BREAK BIT
13:45	0.25	14.00	14:00	7	RIG SERVICE				RIG SERVICE F/T BLIND RAMS OUT OF HOLE 4 SEC C/O
14:00	0.25	14.25	14:15	21	SAFETY MEETING				SAFETY MEETING WITH BAKER PRIOR TO MAKE UP CORE BARRELS
14:15	4.75	19.00	19:00	4	CORING				PICK UP AND MAKE UP CORE BARRELS
19:00	0.25	19.25	19:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING W/ RIG CREW□RM□HUSKY REP
19:15	0.25	19.50	19:30	4	CORING				HANDLE CORE BRLS FINISH PUTTING CORE TOOLS TOGETHER
19:30	4.50	24.00	00:00	6	TRIPS				TRIP IN HOLE W/CORE BRLS FILL PIPE AT 700M

Last 5 Formations

Formation Name	Pro□ Top (TVD) (mKB)	Drill Top MD (mKB)

Hole Size (mm)

Max Nominal OD (mm)
244.5

Mud Checks

Type	Time	Depth (mKB)	Den□ity (k□/m□)	Vi□ (□/L)	Pla□tic Vi□c (cp)	Yield Point (Pa)
INVERT	06:15	1,170.00	1205.0	48	18.0	3.500

Gel 10 □ec (Pa)	Gel 10 min (Pa)	Gel 30 min (Pa)	Filtrate (mL/30min)	Filter Cake (mm)	pH	Solid□ (□)
3.500	8.000	11.000				13.2

MBT (k□/m□)	Percent Oil (□)	Percent Water (□)	Chloride□ (m□/L)	Calci□m (m□/L)	Pota□□i□m (m□/L)	Electric Sta□ (V)
	81.0	19.0	242,164.001			927.0

Whole M□d Added (m□)	M□d Lo□t to Hole (m□)	M□d Lo□t to S□rface (m□)	Re□erve M□d Vol□me (m□)	Active M□d Vol□me (m□)
	2.30	2.00	129.80	74.70

Drill Strings

BHA #3, Drilling Assembly

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)
3	222.2mm, Mi516, □D1380	SMITH	-------	847

No□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...
12.7/12.7/12.7/9.5/9.5/9.5/12.7/12.7	1,170.00		17.5

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread
Kelly	1	168.0	68.0	9.56	
Drill pipe - Sin□le□	1	101.6	70.0	9.26	
Drill pipe - Stand□	54	101.6	70.0	1,003.76	
HWDP(4.0 IN)	8	101.6	68.0	72.64	
X/O	1	165.0	73.0	0.71	
DC (6.25 IN)	2	165.0	58.0	18.97	
□ARS-HYD/MECH	1	158.0	71.0	6.10	
DC (6.25 IN)	2	165.0	58.0	18.96	
P□mp o□t □□□	1	157.0	58.0	1.02	
MONEL	2	167.0	73.0	18.89	
UBHO	1	164.0	73.0	0.92	
MOTOR HS	1	166.0	58.0	8.97	

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
Ori□inal Hole, 300H6465...	1,154.00	1,170.00	660.00	1.00	37.75	16.0	1.450

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
2,000	45	9,500	27,000	31,000	25,000	3,800.0	580.0

□ (□in) (m□/min)	T (In) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

BHA #4, Coring Assembly

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)
4	222.2mm, 406C, 7136984	H□□he□	1-1-WT-A-X-0-NO-BHA	

No□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...
	1,204.00		5.4

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread
Kelly	1	168.0	68.0	8.71	
Drill Pipe □tand□	55	101.6	70.0	1,022.20	
HWDP	8	101.6	68.0	72.64	
XO S□□	1	165.0	49.0	0.71	
Drill Collar	4	165.0	49.0	37.93	
P□mp O□t S□□	1	157.0	58.0	1.02	
Float S□□	1	157.0	58.0	0.46	
Lee □ar□	1	171.0	72.0	2.15	
Core Barrel	6	171.0	89.0	57.74	

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
Ori□inal Hole, 300H6465...	1,170.00	1,170.00		0.00			

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
0	0		37,000				

□ (□in) (m□/min)	T (In) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

Well Name: HUSKY LITTLE BEAR H-64

Kick/Lost Circ

Occ□r Date	Occ□r Depth (mKB)	Control Date	Control Depth (mKB)	Incident Type

Comment

Casing Strings

Ca□in□ De□cription	R□n Date	Set Depth (mKB)

Comment

Casing Components

Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...

Husky Energy — Daily Drilling - Detail (legal size)

Report Start Date: 2/28/2012
Report #: 12, DFS: 9.52
Depth Progress: 34.00

Well Name: HUSKY LITTLE BEAR H-64

Licensed UWI	Surface Legal Location	Licence No.	State/Province
300H64650012600	300H64650012600	462	N.W.T

Sour Class	ERP Required	Lahee Classification	Business Unit
Sweet	No	TH (C)	Canada Frontier - Exploration

Initial Ground Elevation (m)	Cut/Fill (m)	Ground Elv. (m)	KB Elevation (m)	KB to Gnd (m)
178.00	0.0	178.00	183.20	5.20

KB-Casing Flange Distance (m)	KB-Tubing Head Distance (m)	Total Depth All (TVD) (mKB)
5.47	5.00	Original Hole - 1340.8

Primary Wellbore Affected: Original Hole, 300H64650012600

Weather	Temperature (°C)	Road Condition	Hole Condition
Light Snow	-31	Fair	Good

Operation at Report Time	Operation Next Report Period
RIH W/Core Barrel run #2.	RIH W/Core Barrel run #2, Circ Bttm Up, Cut core, Circ Bttm Up, Pooh w/Core run #2, Retrieve core, Service Core Barrel, Run in w/Core Barrel Run #3.

Operation 06:00	Operation Summary
Circulate Bttm Up clean hole prior to trip out.	Tripped in the hole with core #1 Lbr run #1. Wash in from 1150m to 1170m. Circulated bottom up and then dropped the core ball. Cut core #1 from 1170m to 1194m. Serviced the rig and functioned the pipe rams. And held a crew hand over and a safety meeting. Cut Core from 1194m to 1204m. Circulated bottom up and pumped a weighted pill. Pulled out of the hole due to a jammed core. Held a safety meeting with the core hand and then recovered 28.5m of core. (cut core #1 from 1170m to 1204m. Recovered 28.5m.). Serviced the core #1L and then ran back in the hole with the core #1Lbr run #2. Held safety crew change meeting with both crews, Rig Manager #1Husky Rep.

Remark
No Accident, Incident or Enviromental Concern.

Direction to the location. From Norman Well, Take the winter road south for approx 34.4km. Turn right and go through the security. Continue on the Husky Winter Rd to the Husky Camp Site. Continue on the Husky Winter Rd to km 44 Turn left and continue to km 46. Keep left and go to location at km 47. All road are RADIO CONTROLLED.

Tank Farm delivered for Little Bear H-64
Base Oil Delivered today 0m3, Total at Tank Farm 27m3.
Invert Delivered today 0m3, Total at Tank Farm 176.8m3

Daily invert loss: 1.00m3
Total invert loss: 25.77m3

Daily Contacts

Type	Contact Name	Title	Mobile
Office	Kim Richardson	DR Superintendent	403-542-1059
Office	Goly Zilai	DR Eng	403-462-8021
Office	Sandeep Randhawa	DR Eng	403-519-5660
Office	Darren Brown	Construction Super	
Well Site Supervisor	Cal Conklin	DR Field Super	403-502-3387
Well Site Supervisor	Woody Periard	DR Field Super	403-350-6027
Well Site Supervisor	Dan Heidorfer	DR Field Super	780-446-5160
Rig Manager	Troy Pre###	Rig Manager	

Time Log

Start Time	Dur (hr)	Cum Dur (hr)	End Time	Activity Code	Activity Desc.	Prob/U...	Problem Time (hr)	Problem Ref #	Comment
00:00	0.75	0.75	00:45	6	TRIPS				TRIP IN HOLE FILL WASH TO BOTTOM 1170M F/1150M
00:45	0.50	1.25	01:15	5	COND MUD & CIRC				CIRCULATE BOTTOMS UP, DROP BALL
01:15	3.75	5.00	05:00	4	CORING				CUT CORE 222MM FR 1170M TO 1194M
05:00	0.25	5.25	05:15	7	RIG SERVICE				RIG SERVICE F/T PIPE RAMS 3 SECONDS C/O
05:15	1.75	7.00	07:00	4	CORING				CUT CORE 222MM FR 1194M TO
07:00	0.25	7.25	07:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING WITH OTHER CREW
07:15	0.75	8.00	08:00	4	CORING				CUT CORE FR/1194M TO 1204M
08:00	1.00	9.00	09:00	5	COND MUD & CIRC				CIRCULATE MIX PILL,PREP FLOOR TO TRIP,
09:00	3.00	12.00	12:00	6	TRIPS				PULL OUT OF HOLE TO RECOVER CORE #1 FLOW CHECKS AS REQ. 1193M,1114M,618M, 139M,
12:00	1.00	13.00	13:00	6	TRIPS				CONTINUE TO P.O.O.H FLOW CHECKS AS REQ,1193M,1114M,618M,139M,... OF HOLE /HOLE FILL VOLUMES MESURED 8.44M3/CAL 4.72M3/DIFF 3.72M3
13:00	0.25	13.25	13:15	21	SAFETY MEETING				SAFETY MEETING WITH BAKR CORE HA NDS PRIO TO CORE, RE,COVER #1
13:15	4.75	18.00	18:00	4	CORING				CORING RECOVER CORE #1 TOTAL RECOVER 28 METERS
18:00	1.00	19.00	19:00	4	CORING				CORING CHECK BIT MAKE UP CORE BARREL #2
19:00	0.25	19.25	19:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING WITH OTHER CREW

Cost Object Number	Original AFE Sup Amt
US-51822-EX-02-DR-ID	11,529,266.00

Primary Job Type
Initial Drillin

Start Date	End Date
2/17/2012	3/10/2012
Final Status	Spud Date
Drilled & Cased	2/19/2012 11:30
Daily Cost Total	Cum Cost To Date
118,468.24	2,423,338.20
Daily Mud Cost	Mud Additive Cost To Date
775.24	120,158.13
Depth Start (mKB)	Depth End (mKB)
1,170.00	1,204.00

Last Casing String: Surface, 510.00mKB

Depth Progress (m): 34.00

Depth Start (TVD) (mKB)	Depth End (TVD) (mKB)
1,169.80	1,203.80
Target Formation	Est Total Depth (mKB)
Canol	1,412.00
Personnel Total Hours (hr)	Cum Per Tot Hr (hr)
504.00	6,448.00
Time Log Total Hours (hr)	Problem Time Hours (hr)
24.00	
Problem Time (%)	Cum Problem Time (%)
Days LTI (days)	Days RI (days)

Personnel Log

Company	Count	Tot Time (hr)
Nabors Drilling Limited	15	180.00
Mi Swaco	1	12.00
Apex Oilfield Service 2000 Inc.	1	12.00
R G Mallett Oilfield Enterprise	1	12.00
Heidorfer Consulting Ltd.	1	12.00
McGrath Resource Consulting Ltd.	1	12.00
Horizon North Camp Cat	5	60.00
#NEW VENDOR#	2	24.00
#NEW VENDOR#	1	12.00
#NEW VENDOR#	1	12.00
#NEW VENDOR#	2	24.00
Continental Laboratories	2	24.00
Hse Integrated Ltd.	1	12.00
Frontier	1	12.00
Phoenix Technology Service LP	2	24.00
Baker Hughes	2	24.00
Husky	2	24.00
#NEW VENDOR#	1	12.00

Safety Check Summary

Type	Last Date	Next Date
Safety Meetin	2/28/2012	2/29/2012

Rigs

Contractor	Rig Number
Nabors Drillin	23
Rig Supervisor	Phone Mobile
Troy Pre###	

Rig Release Date: 3/10/2012 23:59

Mud Pumps

 # 1, GARDNER DENVER, PZ8

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	203.0
Liner Size (mm)	Vol/Stk OR (m³/stk)	
152.0	0.011	
Press (kPa)	Slow Spd	Stroke (spm)	Eff (%)
		0	

 # 2, CONTINENTAL EMSCO, F800

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	229.0
Liner Size (mm)	Vol/Stk OR (m³/stk)	
152.0	0.013	
Press (kPa)	Slow Spd	Stroke (spm)	Eff (%)
1,100	Yes	57	95

Mud Additive Amounts

Description	Cost (/unit)	Consumed
LIME	12.13	10.0
FED WATE (BARITE)	15.57	42.0

Survey Data

MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Report Printed: 6/4/2012

Well Name: HUSKY LITTLE BEAR H-64

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
19:15	2.00	21.25	21:15	4	CORING				HANDLE CORE BRLS , □ MAKE UP CORE BARRELS
21:15	2.75	24.00	00:00	6	TRIPS				TRIP IN HOLE FILL HALF WAY □ CONTINUE TO R.I.H.

Mud Checks

Type	Time	Depth (mKB)	Den□ity (k□/m□)	Vi□ (□/L)	Pla□tic Vi□c (cp)	Yield Point (Pa)
Invert	07:00	1,202.00	1280.0	48	18.0	3.500

Gel 10 □ec (Pa)	Gel 10 min (Pa)	Gel 30 min (Pa)	Filtrate (mL/30min)	Filter Cake (mm)	pH	Solid□ (□)
3.000	7.500	11.000				15.3

MBT (k□/m□)	Percent Oil (□)	Percent Water (□)	Chloride□ (m□/L)	Calci□m (m□/L)	Pota□□i□m (m□/L)	Electric Sta□ (V)
	81.0	19.0	237,186.000			891.0

Whole M□d Added (m□)	M□d Lo□t to Hole (m□)	M□d Lo□t to S□rface (m□)	Re□erve M□d Vol□me (m□)	Active M□d Vol□me (m□)
	0.50		129.10	74.80

Drill Strings

BHA #4, Coring Assembly

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)
4	222.2mm, 406C, 7136984	H□□he□	1-1-WT-A-X-0-NO-BHA	

No□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...
	1,204.00		5.4

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread
Kelly	1	168.0	68.0	8.71	
Drill Pipe □tand□	55	101.6	70.0	1,022.20	
HWDP	8	101.6	68.0	72.64	
XO S□□	1	165.0	49.0	0.71	
Drill Collar	4	165.0	49.0	37.93	
P□mp O□t S□□	1	157.0	58.0	1.02	
Float S□□	1	157.0	58.0	0.46	
Lee □ar□	1	171.0	72.0	2.15	
Core Barrel	6	171.0	89.0	57.74	

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
Ori□inal Hole, 300H6465...	1,170.00	1,204.00	34.00	6.25	6.25	5.4	1.200

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
3	55	7,500	37,000	38,000	36,000	3,850.0	275.0

□ (□in) (m□/min)	T (In) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

BHA #5, Coring Assembly

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)
5RR	222.2mm, 406C, 7136984	H□□he□	1-1-WT-A-X-0-NO-BHA	

No□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...
	1,222.00		6.0

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread
Kelly	1	170.0	68.0	8.24	
Drill pipe - Stand□	56	101.6	70.0	1,040.67	
8-HWDP	1	101.6	68.0	72.64	
X/O	1	165.0	49.0	0.71	
4-DRILL COLLARS	1	165.0	49.0	37.93	
PUMP OUT SUB	1	157.0	58.0	1.02	
FLOAT X/O	1	157.0	58.0	0.46	
1-LEE □ARS	1	171.0	72.0	2.15	
6- CORE BARRELS	1	171.0	137.0	57.74	

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
Ori□inal Hole, 300H6465...	1,204.00	1,204.00		0.00			0.000

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
0	0		37,000				

□ (□in) (m□/min)	T (In) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

Kick/Lost Circ

Occ□r Date	Occ□r Depth (mKB)	Control Date	Control Depth (mKB)	Incident Type

Comment

Casing Strings

Ca□in□ De□cription	R□n Date	Set Depth (mKB)

Comment

Casing Components

Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...

Last 5 Formations

Formation Name	Pro□ Top (TVD) (mKB)	Drill Top MD (mKB)

Hole Size (mm)

Max Nominal OD (mm)
244.5

Husky Energy — Daily Drilling - Detail (legal size)

Report Start Date: 2/29/2012
Report #: 13, DFS: 10.52
Depth Progress: 18.00

Well Name: HUSKY LITTLE BEAR H-64

Licensed UWI	Surface Legal Location	Licence No.	State/Province
300H64650012600	300H64650012600	462	N.W.T

Sour Class	ERP Required	Lahee Classification	Business Unit
Sweet	No	TH (C)	Canada Frontier - Exploration

Initial Ground Elevation (m)	Cut/Fill (m)	Ground Elv. (m)	KB Elevation (m)	KB to Gnd (m)
178.00	0.0	178.00	183.20	5.20

KB-Casing Flange Distance (m)	KB-Tubing Head Distance (m)	Total Depth All (TVD) (mKB)
5.47	5.00	Original Hole - 1340.8

Primary Wellbore Affected: Original Hole, 300H64650012600

Weather	Temperature (°C)	Road Condition	Hole Condition
Clear	-34	Fair	Good

Operation at Report Time: Circ Bottoms Up Prior to Begin cut core.

Operation Next Report Period: RIH W/Core Barrel run #2, Circ Bttms Up, Cut core, Circ Bttms Up, Pooh w/Core run #3, Retrieve core, Service Core Barrel, Run in w/Core Barrel Run #4.

Operation 06:00	Operation Summary
Circ Bttms Up prior to trip out w/core #3.	Tripped in the hole W/core Barrel #r#n #2, Broke circulation and washed 2 #in#le#to bottom. Circulated bottoms up. Cut core #2 from 1204m to 1222.0m. Circulated bottoms up. Pumped a waited pill and pulled out of the hole with a hammed core. Serviced the rig and functioned the pipe rams. Continued to pull out of the hole to the csg shoe. Held a crew hand over and a safety meeting. Finished pulling out of the hole. Layed out the inner barrel of the core barrel and then recovered 16m of core #2.Held a crew hand over and a safety meeting. Serviced the core barrel. Serviced the rig and functioned the blind rams. Run back in the hole with the core #3. Wash in F/1206m TO/1222m bottom.

Remark:
No Accident, Incident or Enviromental Concern.

Direction to the location. From Norman Well, Take the winter road north for approx 34.4km. Turn right and go through the security. Continue on the Husky Winter Rd to the Husky Camp Site. Continue on the Husky Winter Rd to km 44 Turn left and continue to km 46. Keep left and go to location at km 47. All road are RADIO CONTROLLED.

Tank Farm delivered for Little Bear H-64
Base Oil Delivered today = 0m3, Total at Tank Farm = 27m3.
Invert Delivered today = 0m3, Total at Tank Farm = 176.8m3

Daily invert loss: 0.00m3
Total invert loss: 25.77m3

At the Slater River Base Camp there was a release of 2m3 of contaminated water (partially treated grey water / sewage) due to an equipment failure (valve freezing and cranking). Due to the nature of the release and the cold temperature the release immediately froze on the ice pad. Remedial measures to scrape up the ice and disposal of the snow will be taken once the equipment and camp are moved off the location.

Cost Object Number	Original AFE Sup Am
US-51822-EX-02-DR-ID	11,529,266.00

Primary Job Type
Initial Drilling

Start Date	End Date
2/17/2012	3/10/2012
Final Status: Drilled - Cased	Spud Date: 2/19/2012 11:30
Daily Cost Total: 118,406.94	Cum Cost To Date: 2,541,745.14
Daily Mud Cost: 653.94	Mud Additive Cost To Date: 120,812.07
Depth Start (mKB): 1,204.00	Depth End (mKB): 1,222.00

Last Casing String: Surface, 510.00mKB

Depth Progress (m): 18.00

Depth Start (TVD) (mKB)	Depth End (TVD) (mKB)
1,203.80	1,221.79
Target Formation: Canol	Est Total Depth (mKB): 1,412.00
Personnel Total Hours (hr): 504.00	Cum Per Tot Hr (hr): 6,952.00
Time Log Total Hours (hr): 24.00	Problem Time Hours (hr):
Problem Time ():	Cum Problem Time ():
Days LTI (day):	Days RI (day):

Personnel Log

Company	Count	Tot Time (hr)
Nabors Drilling Limited	15	180.00
Mi Swaco	1	12.00
Apex Oilfield Service 2000 Inc.	1	12.00
R G Mallett Oilfield Enterprise	1	12.00
Heidorfer Consulting Ltd.	1	12.00
McGrath Resource Consulting Ltd.	1	12.00
Horizon North Camp Cat	5	60.00
#NEW VENDOR#	2	24.00
#NEW VENDOR#	1	12.00
#NEW VENDOR#	1	12.00
#NEW VENDOR#	2	24.00
Continental Laboratories	2	24.00
Hoe Integrated Ltd.	1	12.00
Frontier	1	12.00
Phoenix Technology Service LP	2	24.00
Baker Hughes	2	24.00
Husky	2	24.00
#NEW VENDOR#	1	12.00

Safety Check Summary

Type	Last Date	Next Date
Safety Meeting	2/29/2012	3/1/2012

Rigs

Contractor	Rig Number
Nabors Drilling	23
Rig Supervisor: Troy Pree	Phone Mobile
Rig Release Date: 3/10/2012 23:59	

Mud Pumps

 # 1, GARDNER DENVER, PZ8

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	203.0

Liner Size (mm)	Vol/Stk OR (m/stk)
152.0	0.011

Press (kPa)	Slow Spd	Strokes (spm)	Eff (%)
		0	

 # 2, CONTINENTAL EMSCO, F800

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	229.0

Liner Size (mm)	Vol/Stk OR (m/stk)
152.0	0.013

Press (kPa)	Slow Spd	Strokes (spm)	Eff (%)
1,380	Yes	46	95

Mud Additive Amounts

Description	Cost (/unit)	Consumed
FED WATE (BARITE)	15.57	42.0

Survey Data

MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Daily Contacts

Type	Contact Name	Title	Mobile
Office	Kim Richardson	DR Superintendent	403-542-1059
Office	Goly Zilaci	DR Eng	403-462-8021
Office	Sandeep Randhawa	DR Eng	403-519-5660
Office	Darren Brown	Construction Super	
Well Site Supervisor	Cal Conklin	DR Field Super	403-502-3387
Well Site Supervisor	Woody Periard	DR Field Super	403-350-6027
Well Site Supervisor	Dan Heidorfer	DR Field Super	780-446-5160
Rig Manager	Troy Pree	Rig Manager	

Time Log

Start Time	Dur (hr)	Cum Dur (hr)	End Time	Activity Code	Activity Desc.	Prob/U...	Problem Time (hr)	Problem Ref #	Comment
00:00	1.75	1.75	01:45	6	TRIPS				TRIP IN HOLE FILL TWO SINGLES FROM BOTTOM , WASH DOWN TWO SINGLES , WAIT FOR BOTTOMS UP
01:45	3.00	4.75	04:45	4	CORING				CUT CORE FR 1204M TO 1222M
04:45	1.50	6.25	06:15	5	COND MUD # CIRC				CIRC BOTTOMS UP TO TRIP OUT OF HOLE
06:15	0.25	6.50	06:30	7	RIG SERVICE				RIG SERVICE F/T PIPE RAMS 3 SECOND C/O
06:30	0.50	7.00	07:00	6	TRIPS				TRIP OUT OF HOLE FLOW CHECKS # 1211M , 1133M
07:00	0.25	7.25	07:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING W/ RIG CREW#RM#HUSKY REP
07:15	3.50	10.75	10:45	6	TRIPS				TRIP OUT OF HOLE FLOW CHECKS # 139M,79M OUT OF HOLE HOLE FILL VOLUMES,MEASURED 6.86 CAL 4.44M3 DIFF 2.42M3
10:45	0.25	11.00	11:00	21	SAFETY MEETING				SAFETY MEETING WITH BAKER CORE HANDS PRIOR TO RECOVER CORE #2
11:00	1.00	12.00	12:00	4	CORING				RECOVER CORE #2
12:00	4.00	16.00	16:00	4	CORING				RECOVER CORE #2 16 METERS RECOVERY
16:00	0.25	16.25	16:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING W/ RIG CREW#RM#HUSKY REP

Well Name: HUSKY LITTLE BEAR H-64

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
16:15	2.75	19.00	19:00	4	CORING				CORING, CHANGE BIT AND MAKE UP CORE BARRELS FOR RUN □3, FUNCTIONED BLIND RAMS ON BANK(4 SEC)
19:00	0.25	19.25	19:15	7	RIG SERVICE				RIG SERVICE
19:15	3.75	23.00	23:00	6	TRIPS				TRIP IN, 61M - 710M, FLOW CHECK, BREAK CIRCULATION, CONT. IN 710M - 1206M, FLOW CHECK, BREAK CIRCULATION
23:00	0.25	23.25	23:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING W/ RIG CREW□RM□HUSKY REP
23:15	0.75	24.00	00:00	6	TRIPS				WASH IN F/1206M - 1222M

Mud Checks

Type	Time	Depth (mKB)	Den□ity (k□/m□)	Vi□ (□/L)	Pla□tic Vi□c (cp)	Yield Point (Pa)
Invert	05:30	1,222.00	1290.0	50	19.0	4.000

Gel 10 □ec (Pa)	Gel 10 min (Pa)	Gel 30 min (Pa)	Filtrate (mL/30min)	Filter Cake (mm)	pH	Solid□ (□)
4.000	8.500	13.500				15.8

MBT (k□/m□)	Percent Oil (□)	Percent Water (□)	Chloride□ (m□/L)	Calci□m (m□/L)	Pota□□i□m (m□/L)	Electric Sta□ (V)
	81.0	19.0	237,186.000			816.0

Whole M□d Added (m□)	M□d Lo□t to Hole (m□)	M□d Lo□t to S□rface (m□)	Re□erve M□d Vol□me (m□)	Active M□d Vol□me (m□)
0.00	0.00	1.00	128.20	75.00

Drill Strings

BHA #5, Coring Assembly

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)
5RR	222.2mm, 406C, 7136984	H□□he□	1-1-WT-A-X-0-NO-BHA	

No□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...
	1,222.00		6.0

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread
Kelly	1	170.0	68.0	8.24	
Drill pipe - Stand□	56	101.6	70.0	1,040.67	
8-HWDP	1	101.6	68.0	72.64	
X/O	1	165.0	49.0	0.71	
4-DRILL COLLARS	1	165.0	49.0	37.93	
PUMP OUT SUB	1	157.0	58.0	1.02	
FLOAT X/O	1	157.0	58.0	0.46	
1-LEE □ARS	1	171.0	72.0	2.15	
6- CORE BARRELS	1	171.0	137.0	57.74	

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
Ori□inal Hole, 300H6465...	1,204.00	1,222.00	18.00	3.00	3.00	6.0	1.200

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
3	55	8,050	28,000	29,000	27,000	3,850.0	550.0

□ (□in) (m□/min)	T (In) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

BHA #6, Drilling Assembly

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)
6	222.0mm, 406C, 7135973	HUGHES	1-1-WT-A-X-0.00-NO-BHA	

No□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...
	1,241.00		4.5

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread
Kelly	1	168.0	68.0	8.77	
Drill pipe - Stand□	57	101.6	70.0	1,059.14	
8-HWDP	1	102.0	68.0	72.64	
X/O	1	165.0	49.0	0.71	
4-DRILL COLLARS	1	165.0	49.0	37.93	
PUMP OUT SUB	1	157.0	58.0	1.02	
FLOAT X/O	1	157.0	58.0	0.46	
1-LEE □ARS	1	171.0	72.0	2.15	
6- CORE BARRELS	1	171.0	137.0	57.74	

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
Ori□inal Hole, 300H6465...	1,222.00	1,222.00		0.00			1.200

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
0	0	7,500	31,000	32,000	30,000		450.0

□ (□in) (m□/min)	T (In) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

Kick/Lost Circ

Occ□r Date	Occ□r Depth (mKB)	Control Date	Control Depth (mKB)	Incident Type

Comment

Casing Strings

Ca□in□ De□cription	R□n Date	Set Depth (mKB)

Comment

Last 5 Formations

Formation Name	Pro□ Top (TVD) (mKB)	Drill Top MD (mKB)

Hole Size (mm)

Max Nominal OD (mm)
244.5

Well Name: HUSKY LITTLE BEAR H-64

Casing Components

Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...

Husky Energy — Daily Drilling - Detail (legal size)

Report Start Date: 3/1/2012
Report #: 14, DFS: 11.52
Depth Progress: 26.00

Well Name: HUSKY LITTLE BEAR H-64

Licenced UWI	Surface Legal Location	Licence No.	State/Province
300H64650012600	300H64650012600	462	N.W.T

Sour Class	ERP Required	Lahee Classification	Business Unit
Sweet	No	TH (C)	Canada Frontier - Exploration

Initial Ground Elevation (m)	Cut/Fill (m)	Ground Elv. (m)	KB Elevation (m)	KB to Gnd (m)
178.00	0.0	178.00	183.20	5.20

KB-Casing Flange Distance (m)	KB-Tubing Head Distance (m)	Total Depth All (TVD) (mKB)
5.47	5.00	Original Hole - 1340.8

Primary Wellbore Affected: Original Hole, 300H64650012600

Weather	Temperature (°C)	Road Condition	Hole Condition
Clear	-31	Fair	Good

Operation at Report Time: Cuttings core 4 @ 1248m.

Operation Next Report Period: Cut Core 4, circ bttms up, POOH W/Core 4, Retrieve core 4, Service core barrel, RIH, Circ Bottms up, Cut core 5.

Operation 06:00: Tripping out with core 4.

Operation Summary: Circulated bottoms up and then dropped the ball. Cut core 3 from 1,222m to 1241m. Circulated bottoms up due to jammed core. Pumped a weighted pill and pulled out of the hole and recovered 18m of core 3. Serviced the rig and functioned the annular. Held a crew hand over and a safety meeting. Finished pulling out of the hole. Retrieved core 3 and serviced the core BHA. Held a BOP drill and functioned the blind rams. Ran back in the hole with core BHA Ran 4. Held a crew hand over and a safety meeting. Continued to run in the hole with core BHA ran 4. Circulated bottoms up and then dropped the ball. Cut core 4 from 1,241m to 1248m.

Core 3 1222.4m to 1241.2m @ 18.8m. Recovered 18.10m

Remark:
No Accident, Incident or Enviromental Concern.

Direction to the location. From Norman Well, Take the winter road south for approx 34.4km. Turn right and go through the security. Continue on the Husky Winter Rd to the Husky Camp Site. Continue on the Husky Winter Rd to km 44 Turn left and continue to km 46. Keep left and go to location at km 47. All road are RADIO CONTROLLED.

Tank Farm delivered for Little Bear H-64
Base Oil Delivered today @ 0m3, Total at Tank Farm @ 27m3.
Invert Delivered today @ 0m3, Total at Tank Farm @ 176.8m3

Daily invert loss: 0.00m3
Total invert loss: 25.77m3

Daily Contacts

Type	Contact Name	Title	Mobile
Office	Kim Richardson	DR Superintendent	403-542-1059
Office	Goly Zilazi	DR Eng	403-462-8021
Office	Sandeep Randhawa	DR Eng	403-519-5660
Office	Darren Brown	Construction Super	
Well Site Supervisor	Cal Conklin	DR Field Super	403-502-3387
Well Site Supervisor	Woody Periard	DR Field Super	403-350-6027
Well Site Supervisor	Dan Heidorfer	DR Field Super	780-446-5160
Rig Manager	Troy Preston	Rig Manager	

Time Log

Start Time	Dur (hr)	Cum Dur (hr)	End Time	Activity Code	Activity Desc.	Prob/U...	Problem Time (hr)	Problem Ref #	Comment
00:00	0.75	0.75	00:45	5	COND MUD @ CIRC				CIRCULATE PRIOR TO DROP BALL
00:45	4.25	5.00	05:00	4	CORING				DROP BALL AND CUT CORE 3 222MM FR/1222M-TO- 1241M
05:00	1.00	6.00	06:00	5	COND MUD @ CIRC				CONDITION MUD @ CIRCULATE
06:00	0.75	6.75	06:45	6	TRIPS				TRIPS PULL OUT OF HOLE WITH CORE @ 3 TO 1097M
06:45	0.25	7.00	07:00	7	RIG SERVICE				RIG SERVICE F/T ANNULAR 6 SEC C/O
07:00	0.25	7.25	07:15	21	SAFETY MEETING				PRE TOUR SAFETY MEETING AND CREW CHANGE HAND OVER
07:15	3.75	11.00	11:00	6	TRIPS				TRIP OUT W/ CORE 3 1097M - 57M, FLOW CHECKS @ 1097M, 785M, 344M,
11:00	1.00	12.00	12:00	4	CORING				CORING, RETRIEVE CORE 3, HELD SAFETY MEETING W/ CREW AND BAKER HUGHES PRIOR TO, MONITOR WELL DURING
12:00	2.50	14.50	14:30	4	CORING				CORING, RETRIEVE CORE 3, MONITOR WELL THROUGHOUT
14:30	0.25	14.75	14:45	6	TRIPS				TRIP OUT, 58M - 0M, FLOW CHECK AND FUNCTION BLIND RAM(4 SEC) ON BANK
14:45	0.25	15.00	15:00	21	SAFETY MEETING				DRILLS, SOUR BOP DRILL HELD ON BANK, WELL SECURED IN 3.5 MIN
15:00	0.25	15.25	15:15	6	TRIPS				TRIP IN 0M - 58M
15:15	1.75	17.00	17:00	4	CORING				CORING, MAKE UP CORE BARRELS FOR RUN 4

Cost Object Number	Orig AFE Sup Amt
US-51822-EX-02-DR-ID	11,529,266.00

Primary Job Type	
Initial Drillin	

Start Date	End Date
2/17/2012	3/10/2012
Final Stat	Spud Date
Drilled @ Cased	2/19/2012 11:30
Daily Cost Total	Cum Cost To Date
118,406.94	2,660,152.08
Daily Mud Cost	Mud Additive Cost To Date
653.94	121,466.01
Depth Start (mKB)	Depth End (mKB)
1,222.00	1,248.00

Last Casing Strin: Surface, 510.00mKB

Depth Progress (m): 26.00

Depth Start (TVD) (mKB)	Depth End (TVD) (mKB)
1,221.79	1,247.79
Target Formation	Est Total Depth (mKB)
Canol	1,412.00
Personnel Total Hour (hr)	Cum Per Tot Hr (hr)
504.00	7,456.00
Time Log Total Hour (hr)	Problem Time Hour (hr)
24.00	
Problem Time (@)	Cum Problem Time (@)
Day LTI (day)	Day RI (day)

Personnel Log

Company	Count	Tot Time (hr)
Nabor Drilling Limited	15	180.00
Mi Swaco	1	12.00
Apex Oilfield Service 2000 Inc.	1	12.00
R G Mallett Oilfield Enterprise	1	12.00
Heidorfer Construction Ltd.	1	12.00
McGrath Resource Construction Ltd.	1	12.00
Horizon North Camp Cat	5	60.00
NEW VENDOR	2	24.00
NEW VENDOR	1	12.00
NEW VENDOR	1	12.00
NEW VENDOR	2	24.00
Continental Laboratories	2	24.00
Hoe Inte rated Ltd.	1	12.00
Frontier	1	12.00
Phoenix Technology Service LP	2	24.00
Baker Hughes	2	24.00
Husky	2	24.00
NEW VENDOR	1	12.00

Safety Check Summary

Type	Last Date	Next Date
Safety Meetin	3/1/2012	3/2/2012

Rigs

Contractor	Rig Number
Nabor Drilling	23
Rig Supervisor	Phone Mobile
Troy Preston	
Rig Release Date	
3/10/2012 23:59	

Mud Pumps

 # 1, GARDNER DENVER, PZ8

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	203.0
Liner Size (mm)	Vol/Stk OR (m/stk)	
152.0	0.011	
Press (kPa)	Slow Spd	Strokes (spm)	Eff (%)
		0	

 # 2, CONTINENTAL EMSCO, F800

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	229.0
Liner Size (mm)	Vol/Stk OR (m/stk)	
152.0	0.013	
Press (kPa)	Slow Spd	Strokes (spm)	Eff (%)
1,233	Yes	50	95

Mud Additive Amounts

Description	Cost (/unit)	Consumed
FED WATE (BARITE)	15.57	42.0

Survey Data

MD (mKB)	Incl (°)	Azm (°)	TVD (mKB)

Well Name: HUSKY LITTLE BEAR H-64

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
17:00	2.00	19.00	19:00	6	TRIPS				TRIP IN W/CORE BBLS RUN □4 F/58M - 597M, FLOW CHECK, BREAK CIRCULATION
19:00	0.25	19.25	19:15	21	SAFETY MEETING				SAFETY MEETING HELD FOR SHIFT CHANGE W/ BOTH CREWS, R.M. AND OPERATORS REP.
19:15	2.00	21.25	21:15	6	TRIPS				RUN IN HOLE WITH CORE □4
21:15	1.00	22.25	22:15	5	COND MUD □ CIRC				CONDITION MUD □ CIRCULATE PRIOR TO DROP BALL
22:15	1.50	23.75	23:45	4	CORING				CORING 222MM HOLE FR /1241M-TO - 1248M
23:45	0.25	24.00	00:00	7	RIG SERVICE				RIG SERVICE F/T PIPE RAMS 4 SEC C/O

Last 5 Formations

Formation Name	Pro□ Top (TVD) (mKB)	Drill Top MD (mKB)

Hole Size (mm)

Max Nominal OD (mm)
244.5

Mud Checks

Type	Time	Depth (mKB)	Den□ity (k□/m□)	Vi□ (□/L)	Pla□tic Vi□c (cp)	Yield Point (Pa)
INVERT	23:45	1,248.00	1250.0	86	19.0	4.000

Gel 10 □ec (Pa)	Gel 10 min (Pa)	Gel 30 min (Pa)	Filtrate (mL/30min)	Filter Cake (mm)	pH	Solid□ (□)
4.000	8.500	13.500				15.8

MBT (k□/m□)	Percent Oil (□)	Percent Water (□)	Chloride□ (m□/L)	Calci□m (m□/L)	Pota□□i□m (m□/L)	Electric Sta□ (V)
	81.0	19.0	237,186.000			

Whole M□d Added (m□)	M□d Lo□t to Hole (m□)	M□d Lo□t to S□rface (m□)	Re□erve M□d Vol□me (m□)	Active M□d Vol□me (m□)
0.00	0.00	0.00	128.10	75.00

Drill Strings

BHA #6, Drilling Assembly

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)
6	222.0mm, 406C, 7135973	HUGHES	1-1-WT-A-X-0.00-NO-BHA	

No□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...
	1,241.00		4.5

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread
Kelly	1	168.0	68.0	8.77	
Drill pipe - Stand□	57	101.6	70.0	1,059.14	
8-HWDP	1	102.0	68.0	72.64	
X/O	1	165.0	49.0	0.71	
4-DRILL COLLARS	1	165.0	49.0	37.93	
PUMP OUT SUB	1	157.0	58.0	1.02	
FLOAT X/O	1	157.0	58.0	0.46	
1-LEE □ARS	1	171.0	72.0	2.15	
6- CORE BARRELS	1	171.0	137.0	57.74	

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
Ori□inal Hole, 300H6465...	1,222.00	1,241.00	19.00	4.25	4.25	4.5	1.200

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
3	45	7,500	31,000	32,000	30,000	2,750.0	450.0

□ (□in) (m□/min)	T (In) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

BHA #7, Drilling Assembly

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)
7RR	222.0mm, 406C, 7135973	HUGHES	1-1-WT-A-X-0.00-NO-BHA	

No□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...
	1,256.00		4.3

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread
Kelly	0	170.0	68.0	5.31	
Drill pipe - Stand□	58	101.6	70.0	1,077.60	
8-HWDP	1	101.6	68.0	72.64	
X/O	1	165.0	49.0	0.71	
4-DRILL COLLARS	1	165.0	49.0	37.93	
PUMP OUT SUB	1	157.0	58.0	1.02	
FLOAT X/O	1	157.0	58.0	0.46	
1-LEE □ARS	1	171.0	72.0	2.15	
6- CORE BARRELS	1	171.0	137.0	57.74	

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
Ori□inal Hole, 300H6465...	1,241.00	1,248.00	7.00	1.50	1.50	4.7	1.200

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
3	45	7,600	32,000	34,000	30,000	3,500.0	550.0

□ (□in) (m□/min)	T (In) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

Kick/Lost Circ

Occ□r Date	Occ□r Depth (mKB)	Control Date	Control Depth (mKB)	Incident Type

Comment

Casing Strings

Ca□in□ De□cription	R□n Date	Set Depth (mKB)

Comment

Well Name: HUSKY LITTLE BEAR H-64

Casing Components

Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...

Husky Energy — Daily Drilling - Detail (legal size)

Report Start Date: 3/2/2012
Report #: 15, DFS: 12.52
Depth Progress: 10.00

Well Name: HUSKY LITTLE BEAR H-64

Licen□ed UWI	S□rface Le□al Location	Licen□e No.	State/Province
300H64650012600	300H64650012600	462	N.W.T

So□r Cla□□	ERP Re□□ired	Lahee Cla□□ification	B□□ine□□Unit
Sweet	No	TH (C)	Canada Frontier - Exploration

Initial Gro□nd Elevation (m)	C□t/Fill (m)	Gro□nd Elv. (m)	KB Elevation (m)	KB to Gnd (m)
178.00	0.0	178.00	183.20	5.20

KB-Ca□in□Flan□e Di□tance (m)	KB-T□□in□Head Di□tance (m)	Total Depth All (TVD) (mKB)
5.47	5.00	Ori□inal Hole - 1340.8

Primary Well□ore Affected: Ori□inal Hole, 300H64650012600

Weather	Temperat□re (°C)	Road Condition	Hole Condition
Clear	-30	Fair	Good

Operation□at Report Time: POOH W/Core r□n □5.

Operation□Next Report Period: Recover core □5, Service Core Barrel□, RIH W/R□n □6, Circ □ttm□ □p, C□t core □6, Circ □ttm□ □p, Pooh w/core □6, Recover core □6.

Operation□□ 06:00: Trippin□ in the hole with Core □arrel r□n □6.

Operation□S□mmary: C□t Core □4 from 1248m to 1256.8m. (Core □ammed off) Circ□lated □ottom□ □p. P□mped a wei□hted pill and then p□lled o□t of the hole. Held a crew hand over and a □afety meetin□. Contin□ed to p□ll o□t of the hole. Retrieved core □4. C□t 15.6m and retrieved 15.0m. Serviced the core □□L□and checked the □it. Ran □ack in the hole with core □□L□r□n □5. Wa□hed 21m to □ottom. Circ□lated □ottom□ □p and then dropped the □all. C□t core □5 from 1256.8m to 1258.50m. (core □ammed off). Circ□lated □ottom□ □p. Held a crew hand over and a □afety meetin□. P□mped a wei□hted pill and then p□lled o□t of the hole with core r□n □5.

Remark□

No Accident□, Incident□or Enviromental Concern□.

Direction□to the location. From Norman Well□, Take the winter road □o□th for approx 34.4km. T□rn ri□ht and □o thro□□h the □ec□rity. Contin□e on the H□□ky Winter Rd to the H□□ky Camp Site. Contin□e on the H□□ky Winter Rd to km 44 T□rn left and contin□e to km 46. Keep left and □o to location at km 47. All road□are RADIO CONTROLLED.

Tank Farm delivered for Little Bear H-64
Ba□e Oil Delivered today □ 0m3, Total at Tank Farm □ 27m3.
Invert Delivered today □ 0m3, Total at Tank Farm □176.8m3

Daily invert lo□□e□: 2.30m3
Total invert lo□□e□: 28.1m3

Daily Contacts

Type	Contact Name	Title	Mo□ile
Office	Kim Richard□on	DR S□perintendent	403-542-1059
Office	Goly Zila□i	DR En□	403-462-8021
Office	Sandeep Randhawa	DR En□	403-519-5660
Office	Darren Brown	Con□tr□ction S□per	
Well Site S□pervi□or	Cal Conklin	DR Field S□per	403-502-3387
Well Site S□pervi□or	Woody Periard	DR Field S□per	403-350-6027
Well Site S□pervi□or	Dan He□□dorfer	DR Field S□per	780-446-5160
Ri□ Mana□er	Troy Pre□□□	Ri□ Mana□er	

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
00:00	2.00	2.00	02:00	4	CORING				CORING 222MM HOLE FR 1248M -TO- 1256M
02:00	1.00	3.00	03:00	5	COND MUD □ CIRC				CIRCULATE PRIOR TO PULL CORE □4
03:00	4.00	7.00	07:00	6	TRIPS				P.O.O.H WITH CORE □4 FLOW CHECKS AS RE□
07:00	0.25	7.25	07:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING W/ RIG CREW□RM□HUSKY REP
07:15	0.50	7.75	07:45	6	TRIPS				TRIP OUT CORE □4 TO 57M
07:45	0.25	8.00	08:00	4	CORING				CORING, RETRIEVE BALL
08:00	2.00	10.00	10:00	4	CORING				CORING, RETRIEVE CORE □4, SAFETY MEETING HELD W/ CREW AND BAKER HUGHES PRIOR TO, MONITOR WELL THROUGHOUT
10:00	0.50	10.50	10:30	6	TRIPS				TRIP OUT 58M - 0M, FLOW CHECK AND FUNCTION BLIND RAM ON BANK(4 SEC)
10:30	0.25	10.75	10:45	6	TRIPS				TRIP IN W/CORE BARREL RUN □5 F/ 0M - 57M
10:45	1.25	12.00	12:00	4	CORING				CORING, MAKE UP BARRELS FOR RUN □5, MONITOR WELL THROUGHOUT
12:00	0.25	12.25	12:15	4	CORING				CORING, MAKE UP CORE BARRELS FOR RUN □5, MONITOR WELL
12:15	0.25	12.50	12:30	7	RIG SERVICE				RIG SERVICE, FUNCTIONED HCR(2 SEC)
12:30	4.50	17.00	17:00	6	TRIPS				TRIP IN HOLE W/RUN □5 F/57M - 620M, FLOW CHECK, BREAK CIRCULATION, CONT. IN 620M - 1232M, FLOW CHECK, BREAK CIRCULATION,WASH 1232M - 1256M

Co□t O□ect N□m□er	Ori□ AFE S□p Am
US-51822-EX-02-DR-ID	11,529,266.00

Primary □o□Type	
Initial Drillin□	

Start Date	End Date
2/17/2012	3/10/2012
Final Stat□□	Sp□d Date
Drilled □ Ca□ed	2/19/2012 11:30
Daily Co□t Total	C□m Co□t To Date
118,107.67	2,778,259.75
Daily M□d Co□t	M□d Additive Co□t To Date
1,554.67	123,020.68
Depth Start (mKB)	Depth End (mKB)
1,248.00	1,258.00

La□t Ca□in□Strin□
S□rface, 510.00mKB

Depth Pro□re□□(m)
10.00

Depth Start (TVD) (mKB)	Depth End (TVD) (mKB)
1,247.79	1,257.79
Tar□et Formation	E□t Total Depth (mKB)
Canol	1,412.00
Per□onnel Total Ho□r□(hr□)	C□m Per□Tot Hr (hr□)
540.00	7,996.00
Time Lo□Total Ho□r□(hr□)	Pro□lem Time Ho□r□(hr□)
24.00	
Pro□lem Time (□)	C□m Pro□lem Time (□)
Day□LTI (day□)	Day□RI (day□)

Personnel Log

Company	Co□nt	Tot Time (hr□)
Na□or□Drillin□ Limited	15	180.00
Mi Swaco	1	12.00
Apex Oilfield Service□ 2000 Inc.	1	12.00
R G Mallett Oilfield Enterpri□e□	1	12.00
He□□dorfer Con□□ltin□ Ltd.	1	12.00
Mc□rath Re□o□rce Con□□ltin□ Ltd.	1	12.00
Hori□on North Camp□□ Cat	5	60.00
□NEW VENDOR□	2	24.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	2	24.00
Continental La□oratorie□	2	24.00
H□e Inte□rated Ltd.	1	12.00
Frontier	1	12.00
Phoenix Technolo□y Service□LP	2	24.00
Baker H□□he□	2	24.00
H□□ky	2	24.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	3	36.00

Safety Check Summary

Type	La□t Date	Next Date
Safety Meetin□	3/2/2012	3/3/2012

Rigs

Contractor	Ri□ N□m□er
Na□or□Drillin□	23
Ri□ S□pervi□or	Phone Mo□ile
Troy Pre□□□	

Ri□ Relea□e Date: 3/10/2012 23:59

Mud Pumps

 # 1, GARDNER DENVER, PZ8

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	203.0

Liner Si□e (mm)	Vol/Stk OR (m□/□tk)
152.0	0.011

Pre□ (kPa)	Slow Spd	Stroke□ (□p...	Eff (□)
		0	

 # 2, CONTINENTAL EMSCO, F800

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	229.0

Liner Si□e (mm)	Vol/Stk OR (m□/□tk)
152.0	0.013

Pre□ (kPa)	Slow Spd	Stroke□ (□p...	Eff (□)
3,470	Ye□	66	95

Mud Additive Amounts

De□cription	Co□t (/□nit)	Con□□med
VERSAMOD	900.73	1.0
FED WATE (BARITE)	15.57	42.0

Survey Data

MD (mKB)	Incl (°)	A□m (°)	TVD (mKB)
			0.00

Report Printed: 6/4/2012

Well Name: HUSKY LITTLE BEAR H-64

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
17:00	0.50	17.50	17:30	5	COND MUD □ CIRC				CIRCULATE BOTTOMS UP, DROP BALL
17:30	1.50	19.00	19:00	4	CORING				CUT CORE□5 F/ 1256M - 1258M, □AMMED OFF
19:00	0.25	19.25	19:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING W/ RIG CREW□RM□HUSKY REP
19:15	0.75	20.00	20:00	5	COND MUD □ CIRC				MIX PILL □ CIRCULATE BOTTOMS UP PRIOR TO TRIP OUT
20:00	4.00	24.00	00:00	6	TRIPS				P.O.O.H WITH CORE □5 FLOW CHECKS AS RE□. 1249M,1206M, 141M OUT OF HOLE

Mud Checks

Type	Time	Depth (mKB)	Den□ity (k□/m□)	Vi□ (□/L)	Pla□tic Vi□c (cp)	Yield Point (Pa)
Invert	13:00	1,257.00	1250.0	0	13.0	3.500

Gel 10 □ec (Pa)	Gel 10 min (Pa)	Gel 30 min (Pa)	Filtrate (mL/30min)	Filter Cake (mm)	pH	Solid□ (□)
3.000	7.500	12.500				14.2

MBT (k□/m□)	Percent Oil (□)	Percent Water (□)	Chloride□ (m□/L)	Calci□m (m□/L)	Pota□□i□m (m□/L)	Electric Sta□ (V)
	82.0	18.0	261,449.010			732.0

Whole M□d Added (m□)	M□d Lo□t to Hole (m□)	M□d Lo□t to S□rface (m□)	Re□erve M□d Vol□me (m□)	Active M□d Vol□me (m□)
	0.50		126.00	71.00

Drill Strings

BHA #7, Drilling Assembly

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)
7RR	222.0mm, 406C, 7135973	HUGHES	1-1-WT-A-X-0.00-NO-BHA	

No□□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...
	1,256.00		4.3

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread
Kelly	0	170.0	68.0	5.31	
Drill pipe - Stand□	58	101.6	70.0	1,077.60	
8-HWDP	1	101.6	68.0	72.64	
X/O	1	165.0	49.0	0.71	
4-DRILL COLLARS	1	165.0	49.0	37.93	
PUMP OUT SUB	1	157.0	58.0	1.02	
FLOAT X/O	1	157.0	58.0	0.46	
1-LEE □ARS	1	171.0	72.0	2.15	
6- CORE BARRELS	1	171.0	137.0	57.74	

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
Ori□inal Hole, 300H6465...	1,248.00	1,256.00	15.00	2.00	3.50	4.0	1.200

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
3	45	7,800	32,000	33,000	31,000	3,500.0	550.0

□ (□in) (m□/min)	T (In) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

BHA #8, Drilling Assembly

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)
8RR	222.0mm, 406C, 7135973	HUGHES	1-1-WT-A-X-0.00-NO-BHA	

No□□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...
	1,258.00		1.3

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread
Kelly	0	170.0	68.0	7.31	
Drill pipe - Stand□	58	101.6	70.0	1,077.60	
8-HWDP	1	101.6	68.0	72.64	
X/O	1	165.0	49.0	0.71	
4-DRILL COLLARS	1	165.0	49.0	37.93	
PUMP OUT SUB	1	157.0	58.0	1.02	
FLOAT X/O	1	157.0	58.0	0.46	
1-LEE □ARS	1	171.0	72.0	2.15	
6- CORE BARRELS	1	171.0	137.0	57.74	

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
Ori□inal Hole, 300H6465...	1,256.00	1,258.00	2.00	1.50	1.50	1.3	1.200

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
2,000	40	7,950	32,000	33,000	31,000	2,550.0	450.0

□ (□in) (m□/min)	T (In) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

Kick/Lost Circ

Occ□r Date	Occ□r Depth (mKB)	Control Date	Control Depth (mKB)	Incident Type

Comment

Casing Strings

Ca□in□ De□cription	R□n Date	Set Depth (mKB)

Comment

Casing Components

Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...

Last 5 Formations

Formation Name	Pro□ Top (TVD) (mKB)	Drill Top MD (mKB)

Hole Size (mm)

Max Nominal OD (mm)
244.5

Husky Energy — Daily Drilling - Detail (legal size)

Report Start Date: 3/3/2012
Report #: 16, DFS: 13.52
Depth Progress: 1.00

Well Name: HUSKY LITTLE BEAR H-64

Licen□ed UWI	S□rface Le□al Location	Licen□e No.	State/Province
300H64650012600	300H64650012600	462	N.W.T

So□r Cla□□	ERP Re□□ired	Lahee Cla□□ification	B□□ine□□Unit
Sweet	No	TH (C)	Canada Frontier - Exploration

Initial Gro□nd Elevation (m)	C□t/Fill (m)	Gro□nd Elv. (m)	KB Elevation (m)	KB to Gnd (m)
178.00	0.0	178.00	183.20	5.20

KB-Ca□in□Flan□e Di□tance (m)	KB-T□□in□Head Di□tance (m)	Total Depth All (TVD) (mKB)
5.47	5.00	Ori□inal Hole - 1340.8

Primary Well□ore Affected: Ori□inal Hole, 300H64650012600

Weather	Temperat□re (°C)	Road Condition	Hole Condition
Li□ht Snow	-28	Fair	Good

Operation□at Report Time: Trippin□ in the hole with directional tool□.

Operation□Next Report Period: Wa□h in lo□ □amma, Drill F/1259 - 1269m, Circ □ottom□ □p, Pooh w/Dir Tool□□Laydown, Pick □p Core □arrel□□Rih w/R□n □7.

Operation□□ 06:00: Wa□h in Lo□ Gamma □ 1153m.

Operation□S□mmary: Fini□hed p□llin□ o□t of the hole w/core r□n □5. Held a pre-□o□ □afety meetin□ with the core hand□. Recovered 1.7m of core □5. Serviced the core□□L□and the □it. Serviced the ri□ and f□nctioned the □lind ram□. Ran □ack in the hole with the core □□L□r□n □6 to the c□□ □hoe □ 510m. Slipped and c□t the drill line. Fini□hed r□nnin□ in the hole w/ core r□n □6. Broke circ and wa□hed 15m to □ottom. Circ□lated □ottom□ □p and dropped the core □all. C□t core □6 from 1258.4m to 1259.4m. Core □ammed off. Circ□lated □ottom□□p and p□mped a wei□hted pill. P□lled o□t of the hole to recover core □6. At □□rface recovered 0,70m of core. Laydown core inner t□□e□and rack o□ter t□□□in the derrick. F□nction □lind ram□ and flow check o□t of the hole. Held □afety meetin□ with Directional □Ri□ Crew □H□□ky rep prior to pick□p directional tool□. Pick□p Phoenix Directional Tool□7/8 Lo□e 3 Sta□e motor □et at 1.50 de□ Bent Ho□□in□ with MWD□Gamma.

Remark□

No Accident□, Incident□or Enviromental Concern□.

Direction□to the location. From Norman Well□, Take the winter road □o□th for approx 34.4km. T□rn ri□ht and □o thro□□h the □ec□rity. Contin□e on the H□□ky Winter Rd to the H□□ky Camp Site. Contin□e on the H□□ky Winter Rd to km 44 T□rn left and contin□e to km 46. Keep left and □o to location at km 47. All road□are RADIO CONTROLLED.

Tank Farm delivered for Little Bear H-64
Ba□e Oil Delivered today □ 0m3, Total at Tank Farm □ 27m3.
Invert Delivered today □ 0m3, Total at Tank Farm □ 176.8m3

Daily invert lo□□e□: 2.30m3
Total invert lo□□e□: 28.1m3

Daily Contacts

Type	Contact Name	Title	Mo□ile
Office	Kim Richard□on	DR S□perintendent	403-542-1059
Office	Goly Zila□i	DR En□	403-462-8021
Office	Sandeep Randhawa	DR En□	403-519-5660
Office	Darren Brown	Con□tr□ction S□per	
Well Site S□pervi□or	Cal Conklin	DR Field S□per	403-502-3387
Well Site S□pervi□or	Woody Periard	DR Field S□per	403-350-6027
Well Site S□pervi□or	Dan He□□dorfer	DR Field S□per	780-446-5160
Ri□ Mana□er	Troy Pre□□□	Ri□ Mana□er	

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
00:00	0.50	0.50	00:30	6	TRIPS				CONTINUE TO P.O.O.H FLOW CHECKS AS RE□.1249M,1206M,141M,OUT OF HOLE /HOLE FOLL VOLUMES CAL□4.91M3/MEAS 6.92M3/ DIFF 2.01M3
00:30	0.25	0.75	00:45	21	SAFETY MEETING				PRE-□OB SAFETY WITH BAKER CORE PRIOR TO PULLING BALL WITH HSE,AND PULL CORE BARRELS
00:45	5.50	6.25	06:15	4	CORING				RECOVER CORE □5 RACK BARRELS,CHECK BIT RUN BARRELS , MAKE UP BARRELS
06:15	0.25	6.50	06:30	7	RIG SERVICE				RIG SERVICE F/T BLIND RAMS OUT OF HOLE C/O 4 SEC
06:30	0.50	7.00	07:00	6	TRIPS				RUN IN HOLE W/ CORE RUN □6 TO/320M
07:00	0.25	7.25	07:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING W/ RIG CREW□RM□HUSKY REP
07:15	0.50	7.75	07:45	6	TRIPS				TRIP IN W/ CORE RUN □6 F/320M - 512M, FLOW CHECK, BREAK CIRCULATION
07:45	0.25	8.00	08:00	21	SAFETY MEETING				PRE-□OB SAFETY MEETING REVIEWED □SA B-40(SLIP AND CUT DRILL LINE)
08:00	0.75	8.75	08:45	9	CUT OFF DRILLING LINE				SLIP/CUT DRILLING LINE (15.08M), RESET AND FUNCTION CROWN SAVER FOLLOWING

Co□t O□□ect N□m□er	Ori□ AFE S□p Am
US-51822-EX-02-DR-ID	11,529,266.00

Primary □o□ Type	
Initial Drillin□	

Start Date	End Date
2/17/2012	3/10/2012
Final Stat□□	Sp□d Date
Drilled □ Ca□ed	2/19/2012 11:30
Daily Co□t Total	C□m Co□t To Date
118,107.67	2,896,367.42
Daily M□d Co□t	M□d Additive Co□t To Date
	123,020.68
Depth Start (mKB)	Depth End (mKB)
1,258.00	1,259.00

La□t Ca□in□Strin□: S□rface, 510.00mKB

Depth Pro□re□□(m): 1.00

Depth Start (TVD) (mKB)	Depth End (TVD) (mKB)
1,257.79	1,258.79
Tar□et Formation	E□t Total Depth (mKB)
Canol	1,412.00
Per□onnel Total Ho□r□(hr□)	C□m Per□Tot Hr (hr□)
516.00	8,512.00
Time Lo□Total Ho□r□(hr□)	Pro□lem Time Ho□r□(hr□)
24.00	
Pro□lem Time (□)	C□m Pro□lem Time (□)
Day□LTI (day□)	Day□RI (day□)

Personnel Log

Company	Co□nt	Tot Time (hr□)
Na□or□Drillin□ Limited	15	180.00
Mi Swaco	1	12.00
Apex Oilfield Service□ 2000 Inc.	1	12.00
R G Mallett Oilfield Enterpri□e□	1	12.00
He□□dorfer Con□□ltin□ Ltd.	1	12.00
Mc□rath Re□o□rce Con□□ltin□Ltd.	1	12.00
Hori□on North Camp□□ Cat	5	60.00
□NEW VENDOR□	2	24.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	2	24.00
Continental La□oratorie□	2	24.00
H□e Inte□rated Ltd.	1	12.00
Frontier	1	12.00
Phoenix Technolo□y Service□LP	2	24.00
Baker H□□he□	2	24.00
H□□ky	2	24.00
□NEW VENDOR□	1	12.00
Baker Atla□	1	12.00

Safety Check Summary

Type	La□t Date	Next Date
Safety Meetin□	3/3/2012	3/4/2012

Rigs

Contractor	Ri□ N□m□er
Na□or□Drillin□	23
Ri□ S□pervi□or	Phone Mo□ile
Troy Pre□□□	

Ri□ Relea□e Date: 3/10/2012 23:59

Mud Pumps

 # 1, GARDNER DENVER, PZ8

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	203.0
Liner Si□e (mm)	Vol/Stk OR (m□/□tk)	
152.0	0.011	
Pre□ (kPa)	Slow Spd	Stroke□(□p...	Eff (□)
		0	

 # 2, CONTINENTAL EMSCO, F800

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	229.0
Liner Si□e (mm)	Vol/Stk OR (m□/□tk)	
152.0	0.013	
Pre□ (kPa)	Slow Spd	Stroke□(□p...	Eff (□)
1,500	Ye□	50	95

Mud Additive Amounts

De□cription	Co□t (/□nit)	Con□□med

Survey Data

MD (mKB)	Incl (°)	A□m (°)	TVD (mKB)

Report Printed: 6/4/2012

Well Name: HUSKY LITTLE BEAR H-64

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
08:45	2.50	11.25	11:15	6	TRIPS				TRIP IN W/ CORE RUN □6 F/ 512M - 1244M, FLOW CHECK, BREAK CIRCULATION, WASH 1244M - 1259M
11:15	0.75	12.00	12:00	5	COND MUD □ CIRC				CIRCULATE BOTTOMS UP, DROP BALL
12:00	1.00	13.00	13:00	4	CORING				CUT CORE, RUN □6, F/1258M - 1259M, □AMMED OFF.
13:00	0.75	13.75	13:45	5	COND MUD □ CIRC				MIX PILL □ CIRCULATE BOTTOMS UP
13:45	5.00	18.75	18:45	6	TRIPS				TRIP OUT TO 57M TO RETRIEVE CORE □6 AND L/D CORE TOOLS, FLOW CHECK □ 1249M, PUMP WEIGHTED PILL, FLOW CHECKS □ 1159M, 698M, 328M 149M OUT OF HOLE,HOLE FILL VOLUMES, ACT 7.47M3,CALC 4.91M3 DIFF 2.56M3
18:45	0.25	19.00	19:00	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING W/ RIG CREW□RM□HUSKY REP
19:00	2.50	21.50	21:30	4	CORING				CORING, RETRIEVE BALL, RETRIEVE CORE □6 AND LAY DOWN CORE TOOLS, SAFETY MEETING HELD W/ CREW, HSE AND BAKER HUGHES BREAK BOWN INNER BARRELS,RECOVER .60CM,RACK OUTER BARRELS IN DERRICK
21:30	0.25	21.75	21:45	21	SAFETY MEETING				PRE-□OB SAFETY
21:45	0.25	22.00	22:00	7	RIG SERVICE				RIG SERVICE F/T BLIND RAMS OUT OF HOLE
22:00	1.50	23.50	23:30	20	DIR. WORK				HANDLE DIRECTIONAL TOOLS. SCRIBE,INSERT MWD,
23:30	0.50	24.00	00:00	6	TRIPS				TRIP IN THE HOLE W/ PHOENIX DIRECTIONAL TOOLS

Last 5 Formations

Formation Name	Pro□ Top (TVD) (mKB)	Drill Top MD (mKB)

Hole Size (mm)

Max Nominal OD (mm)
244.5

Mud Checks

Type	Time	Depth (mKB)	Den□ity (k□/m□)	Vi□ (□/L)	Pla□tic Vi□c (cp)	Yield Point (Pa)
Invert	12:00	1,257.00	1250.0	0	13.0	3.500
Gel 10 □ec (Pa)	**Gel 10 min (Pa)**	**Gel 30 min (Pa)**	**Filtrate (mL/30min)**	**Filter Cake (mm)**	**pH**	**Solid□ (□)**
3.000	7.500	12.500				14.2
MBT (k□/m□)	**Percent Oil (□)**	**Percent Water (□)**	**Chloride□ (m□/L)**	**Calci□m (m□/L)**	**Pota□i□m (m□/L)**	**Electric Sta□ (V)**
	82.0	18.0	261,449.010			732.0

Whole M□d Added (m□)	M□d Lo□t to Hole (m□)	M□d Lo□t to S□rface (m□)	Re□erve M□d Vol□me (m□)	Active M□d Vol□me (m□)
	0.00	0.00	126.00	71.00

Drill Strings

BHA #9, Drilling Assembly

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)
9RR	222.0mm, 406C, 7135973	HUGHES	1-1-WT-A-X-0-NO-BHA	

No□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...
	1,259.00		1.0

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread
Kelly	1	170.0	68.0	8.31	
Drill pipe - Stand□	58	101.6	70.0	1,077.60	
8-HWDP	1	101.6	68.0	72.64	
X/O	1	165.0	49.0	0.71	
4-DRILL COLLARS	1	165.0	49.0	37.93	
PUMP OUT SUB	1	157.0	58.0	1.02	
FLOAT X/O	1	157.0	58.0	0.46	
1-LEE □ARS	1	171.0	72.0	2.15	
6- CORE BARRELS	1	171.0	137.0	57.74	

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
Ori□inal Hole, 300H6465...	1,258.00	1,259.00	1.00	1.00	1.00	1.0	1.200

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
3,000	40	8,700	32,000	33,000	31,000	2,750.0	450.0

□ (□in) (m□/min)	T (In) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

BHA #10, Drilling Assembly

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)
RR3	222.0mm, Mi516, □D1380	SMITH	1-1-WT-A-X-0-NO-BHA	

No□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...
	1,270.00		8.8

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread
Kelly	0	170.0	68.0	6.66	
Drill pipe - Stand□	60	101.6	70.0	1,115.05	
HWDP(4.0 IN)	8	101.6	68.0	72.64	
X/O	1	165.0	73.0	0.71	
DC (6.25 IN)	2	165.0	58.0	18.97	

Well Name: HUSKY LITTLE BEAR H-64

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread
□ARS-HYD/MECH	1	163.0	71.0	6.97	
DC (6.25 IN)	2	165.0	58.0	18.96	
PUMPOUT SUB	1	157.0	58.0	1.02	
MONEL	2	167.0	73.0	18.89	
UBHO	1	164.0	73.0	0.92	
MOTOR HS	1	166.0	58.0	8.97	

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
Ori□inal Hole, 300H6465...	1,259.00	1,259.00		0.00			0.000

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
0	0	0					

□ (□in□) (m□/min)	T (In□) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

Kick/Lost Circ

Occ□r Date	Occ□r Depth (mKB)	Control Date	Control Depth (mKB)	Incident Type

Comment

Casing Strings

Ca□in□ De□cription	R□n Date	Set Depth (mKB)

Comment

Casing Components

Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...

Husky Energy — Daily Drilling - Detail (legal size)

Report Start Date: 3/4/2012
Report #: 17, DFS: 14.52
Depth Progress: 11.00

Well Name: HUSKY LITTLE BEAR H-64

Licen□ed UWI	S□rface Le□al Location	Licen□e No.	State/Province
300H64650012600	300H64650012600	462	N.W.T

So□r Cla□□	ERP Re□□ired	Lahee Cla□□ification	B□ine□□ Unit
Sweet	No	TH (C)	Canada Frontier - Exploration

Initial Gro□nd Elevation (m)	C□t/Fill (m)	Gro□nd Elv. (m)	KB Elevation (m)	KB to Gnd (m)
178.00	0.0	178.00	183.20	5.20

KB-Ca□in□ Flan□e Di□tance (m)	KB-T□□in□ Head Di□tance (m)	Total Depth All (TVD) (mKB)
5.47	5.00	Ori□inal Hole - 1340.8

Primary Well□ore Affected: Ori□inal Hole, 300H64650012600

Weather	Temperat□re (°C)	Road Condition	Hole Condition
Li□ht Snow	-30	Fair	Good

Operation□at Report Time: Pickin□ □p and makin□ □p Core Barrel□.

Operation□Next Report Period: RIH W/core □arrel□, Circ □ttm□ □p, C□t core □7, Circ □ttm□ □p, Pooh w/Core r□n □7, Retrieve core, Handle core □arrel.

Operation□□ 06:00: Drop □all to c□t core □7

Operation□S□mmary: Tripped in the hole with the directional tool□. (Shallow te□t the MWD at 450m). Fill pipe and circ□lated □ottom□. Layed down 11 □in□le□. Held a BOP drill. Wa□h □ack to □ottom from 1136 and lo□ well with □amma. Held a crew hand over and a □afety meetin□. Contin□e to lo□ with with □amma to 1257m. Serviced the ri□ and f□nctioned the pipe ram□. Lo□□ed with □amma to 1259m. Drilled ahead from 1259m to 1265m. Circ□lated □ottom hole □ample □p for the □eolo□i□t. Drilled ahead to 1270m. Circ□lated □p a □ottom hole □ample for the □eolo□i□t and wait on order□. P□mped □p a □ottom hole □□rvey. P□mped a wei□hted pill and p□lled o□t of the hole for core □□L□. Held a crew hand over and a □afety meetin□. Conin□ed to P□ll o□t of the hole, At □□rface held a □afety meetin□ with Ri□ Crew □ Directional □ H□□ky rep prior to laydown directional tool□. Once o□t of the hole f□nction □lind ram□ and flow check well. Held □afety meetin□ with Ri□ Crew □ Core Hand □ H□□ky rep prior to pick□p and make □p core □arrel□, r□n □7.

Remark□

No Accident□, Incident□or Enviromental Concern□.

Direction□to the location. From Norman Well□, Take the winter road □o□th for approx 34.4km. T□rn ri□ht and □o thro□□h the □ec□rity. Contin□e on the H□□ky Winter Rd to the H□□ky Camp Site. Contin□e on the H□□ky Winter Rd to km 44 T□rn left and contin□e to km 46. Keep left and □o to location at km 47. All road□are RADIO CONTROLLED.

Tank Farm delivered for Little Bear H-64
Ba□e Oil Delivered today □ 0m3, Total at Tank Farm □ 27m3.
Invert Delivered today □ 0m3, Total at Tank Farm □ 176.8m3

Daily invert lo□□e□: 1.0m3
Total invert lo□□e□: 29.1m3

Daily Contacts

Type	Contact Name	Title	Mo□ile
Office	Kim Richard□on	DR S□perintendent	403-542-1059
Office	Goly Zila□i	DR En□	403-462-8021
Office	Sandeep Randhawa	DR En□	403-519-5660
Office	Darren Brown	Con□tr□ction S□per	
Well Site S□pervi□or	Cal Conklin	DR Field S□per	403-502-3387
Well Site S□pervi□or	Woody Periard	DR Field S□per	403-350-6027
Well Site S□pervi□or	Dan He□□dorfer	DR Field S□per	780-446-5160
Ri□ Mana□er	Troy Pre□□□	Ri□ Mana□er	

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
00:00	3.00	3.00	03:00	6	TRIPS				TRIPS IN HOLE W/DIRECTIONAL TOOLS FLOW CHECK AND SHALLOW TEST 450M
03:00	0.50	3.50	03:30	5	COND MUD □ CIRC				CONDITION MUD □ CIRCULATE UP BOTTOM UP,CHECK WITH HSE
03:30	1.00	4.50	04:30	6	TRIPS				LAY DOWN 11 SINGLES TO RELOG GAMMA
04:30	0.25	4.75	04:45	21	SAFETY MEETING				DRILLS/BOP, USED MAN DOWN DRILL ,AND WALKED AROUND WITH HAND,
04:45	2.25	7.00	07:00	20	DIR. WORK				DIRECTIONAL SURVEYS RELOG GAMMA FR/1136M - 1173M
07:00	0.25	7.25	07:15	21	SAFETY MEETING				CREW CHANGE HAND OVER AND PRE TOUR SAFETY MEETING
07:15	4.50	11.75	11:45	20	DIR. WORK				DIRECTIONAL SURVEYS RELOG GAMMA F/ 1173M - 1257M
11:45	0.25	12.00	12:00	7	RIG SERVICE				RIG SERVICE FCT PIPE RAMS 3 SECS C/O
12:00	1.00	13.00	13:00	20	DIR. WORK				DIRECTIONAL SURVEYS RELOG GAMMA F/ 1257M - 1259.5M
13:00	0.50	13.50	13:30	2	DRILL				DRILL 222MM HOLE F/ 1259.5M - 1265M
13:30	1.00	14.50	14:30	5	COND MUD □ CIRC				CONDITION MUD □ CIRCULATE BOTTOMS UP
14:30	0.75	15.25	15:15	2	DRILL				DRILL 222MM HOLE F/ 1265M - 1270M
15:15	1.00	16.25	16:15	5	COND MUD □ CIRC				CONDITION MUD □ CIRCULATE BOTTOMS UP
16:15	0.50	16.75	16:45	23	WAITING ON				W/O ORDERS FROM GEOLOGY

Co□t O□ect N□m□er	Ori□ AFE S□p Am
US-51822-EX-02-DR-ID	11,529,266.00

Primary □o□ Type	
Initial Drillin□	

Start Date	End Date
2/17/2012	3/10/2012
Final Stat□□	Sp□d Date
Drilled □ Ca□ed	2/19/2012 11:30
Daily Co□t Total	C□m Co□t To Date
122,918.43	3,019,285.85
Daily M□d Co□t	M□d Additive Co□t To Date
2,170.43	125,191.11
Depth Start (mKB)	Depth End (mKB)
1,259.00	1,270.00
La□t Ca□in□ Strin□	
S□rface, 510.00mKB	
Depth Pro□re□□ (m)	
11.00	
Depth Start (TVD) (mKB)	Depth End (TVD) (mKB)
1,258.79	1,269.79
Tar□et Formation	E□t Total Depth (mKB)
Canol	1,412.00
Per□onnel Total Ho□r□ (hr□)	C□m Per□Tot Hr (hr□)
528.00	9,040.00
Time Lo□ Total Ho□r□ (hr□)	Pro□lem Time Ho□r□ (hr□)
24.00	
Pro□lem Time (□)	C□m Pro□lem Time (□)
Day□LTI (day□)	Day□RI (day□)

Personnel Log

Company	Co□nt	Tot Time (hr□)
Na□or□Drillin□ Limited	15	180.00
Mi Swaco	1	12.00
Apex Oilfield Service□ 2000 Inc.	1	12.00
R G Mallett Oilfield Enterpri□e□	1	12.00
He□□dorfer Con□□ltin□ Ltd.	1	12.00
Mc□rath Re□o□rce Con□□ltin□ Ltd.	1	12.00
Hori□on North Camp□□ Cat	5	60.00
□NEW VENDOR□	2	24.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	2	24.00
Continental La□oratorie□	2	24.00
H□e Inte□rated Ltd.	1	12.00
Frontier	1	12.00
Phoenix Technolo□y Service□LP	2	24.00
Baker H□□he□	2	24.00
H□□ky	2	24.00
□NEW VENDOR□	1	12.00
Baker Atla□	2	24.00

Safety Check Summary

Type	La□t Date	Next Date
Safety Meetin□	3/4/2012	3/5/2012

Rigs

Contractor	Ri□ N□m□er
Na□or□Drillin□	23
Ri□ S□pervi□or	Phone Mo□ile
Troy Pre□□□	
Ri□ Relea□e Date	
3/10/2012 23:59	

Mud Pumps

 # 1, GARDNER DENVER, PZ8

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	203.0
Liner Si□e (mm)		Vol/Stk OR (m□/□tk)
152.0		0.011
Pre□ (kPa)	Slow Spd	Stroke□ (□p...	Eff (□)
		0	

 # 2, CONTINENTAL EMSCO, F800

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	229.0
Liner Si□e (mm)		Vol/Stk OR (m□/□tk)
152.0		0.013
Pre□ (kPa)	Slow Spd	Stroke□ (□p...	Eff (□)
2,450	Ye□	60	95

Mud Additive Amounts

De□cription	Co□t (/□nit)	Con□□med
VERSAMUL	862.55	1.0
FED WATE (BARITE)	15.57	84.0

Survey Data

MD (mKB)	Incl (°)	A□m (°)	TVD (mKB)
1,186.56	1.00	73.30	1,186.36

Report Printed: 6/4/2012

Well Name: HUSKY LITTLE BEAR H-64

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
16:45	0.25	17.00	17:00	20	DIR. WORK				DIRECTIONAL SURVEY ON BTM
17:00	2.00	19.00	19:00	6	TRIPS				TRIP OUT OF HOLE W/DIRECTIONAL TOOLS (STRAP OUT) FL CK□ 1263,1218,629m
19:00	0.25	19.25	19:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING W/ RIG CREW□RM□HUSKY REP
19:15	0.75	20.00	20:00	6	TRIPS				CNT TO TRIP OUT OF HOLE W/DIRECTIONAL TOOLS (STRAP OUT) FL CK□ 389, OUT OF HOLE STEEL LINE STAP DIFF .86CM/HOLE FILL VOLUMES, MEAS 6.66M3,CALC 4.64M3,2.02M3
20:00	0.25	20.25	20:15	21	SAFETY MEETING				PRE-□OB SAFETY WITH DIR HANDS PRIOR TO DIR TOOLS
20:15	1.75	22.00	22:00	20	DIR. WORK				DIRECTIONAL WORK LAY OUT MWD,RACK MONELS
22:00	0.25	22.25	22:15	21	SAFETY MEETING				PRE-□OB SAFETY PRIOR TO PICK UP AND MAKE UP CORE TOOLS
22:15	1.50	23.75	23:45	4	CORING				PICK UP AND MAKE UP CORE BARRELS, RUN □7
23:45	0.25	24.00	00:00	7	RIG SERVICE				RIG SERVICE F/T BLIND RAMS OUT OF HOLE

Survey Data

MD (mKB)	Incl (°)	A□m (°)	TVD (mKB)
1,214.26	0.60	86.80	1,214.06
1,242.52	0.30	107.90	1,242.31
1,255.00	0.20	120.70	1,254.79

Last 5 Formations

Formation Name	Pro□Top (TVD) (mKB)	Drill Top MD (mKB)

Hole Size (mm)

Max Nominal OD (mm)
244.5

Mud Checks

Type	Time	Depth (mKB)	Den□ity (k□/m□)	Vi□ (□/L)	Pla□tic Vi□c (cp)	Yield Point (Pa)
Invert	12:30	1,264.00	1230.0	46	13.0	3.500
Gel 10 □ec (Pa)	**Gel 10 min (Pa)**	**Gel 30 min (Pa)**	**Filtrate (mL/30min)**	**Filter Cake (mm)**	**pH**	**Solid□ (□)**
3.000	7.000	11.500				13.1
MBT (k□/m□)	**Percent Oil (□)**	**Percent Water (□)**	**Chloride□ (m□/L)**	**Calci□m (m□/L)**	**Pota□□i□m (m□/L)**	**Electric Sta□ (V)**
	82.0	18.0	266,256.989			1113.0

Whole M□d Added (m□)	M□d Lo□t to Hole (m□)	M□d Lo□t to S□rface (m□)	Re□erve M□d Vol□me (m□)	Active M□d Vol□me (m□)
10.00		1.00	120.90	79.10

Drill Strings

BHA #10, Drilling Assembly

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)
RR3	222.0mm, Mi516, □D1380	SMITH	1-1-WT-A-X-0-NO-BHA	

No□□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...
	1,270.00		8.8

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread
Kelly	0	170.0	68.0	6.66	
Drill pipe - Stand□	60	101.6	70.0	1,115.05	
HWDP(4.0 IN)	8	101.6	68.0	72.64	
X/O	1	165.0	73.0	0.71	
DC (6.25 IN)	2	165.0	58.0	18.97	
□ARS-HYD/MECH	1	163.0	71.0	6.97	
DC (6.25 IN)	2	165.0	58.0	18.96	
PUMPOUT SUB	1	157.0	58.0	1.02	
MONEL	2	167.0	73.0	18.89	
UBHO	1	164.0	73.0	0.92	
MOTOR HS	1	166.0	58.0	8.97	

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
Ori□inal Hole, 300H6465...	1,259.00	1,270.00	11.00	1.25	1.25	8.8	1.450

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
4	40	9,280	34,000	35,000	33,000	2,792.0	573.0

□ (□in□) (m□/min)	T (In□) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

Kick/Lost Circ

Occ□r Date	Occ□r Depth (mKB)	Control Date	Control Depth (mKB)	Incident Type

Comment

Casing Strings

Ca□in□ De□cription	R□n Date	Set Depth (mKB)

Comment

Casing Components

Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...

Daily Drilling - Detail (legal size)

Report Start Date: 3/5/2012
Report #: 18, DFS: 15.52
Depth Progress: 32.00

Well Name: HUSKY LITTLE BEAR H-64

Licen□ed UWI	S□rface Le□al Location	Licen□e No.	State/Province
300H64650012600	300H64650012600	462	N.W.T

So□r Cla□□	ERP Re□□ired	Lahee Cla□□ification	B□□ine□□ Unit
Sweet	No	TH (C)	Canada Frontier - Exploration

Initial Gro□nd Elevation (m)	C□t/Fill (m)	Gro□nd Elv. (m)	KB Elevation (m)	KB to Gnd (m)
178.00	0.0	178.00	183.20	5.20

KB-Ca□in□ Flan□e Di□tance (m)	KB-T□□in□ Head Di□tance (m)	Total Depth All (TVD) (mKB)
5.47	5.00	Ori□inal Hole - 1340.8

Primary Well□ore Affected: Ori□inal Hole, 300H64650012600

Weather	Temperat□re (°C)	Road Condition	Hole Condition
Clear	-33	Fair	Good

Operation□at Report Time: RIH W/Directional Tool□.

Operation□Next Report Period: RIH W/Directional tool□, Circ □ttm□□p, Wa□h in □Get Gamma F/1270m to/1302m Bottom, Drill F/1302m to/1341m, Circ, Wiper trip 10 □td□, circ, Pooh □□trap o□t to lo□.

Operation□□ 06:00: Drillin□ ahead at 1303m.

Operation□S□mmary: Fini□hed makin□ □p the core □□L□ R□n the hole with core □□l □7 to 489m. Serviced the ri□ and f□nctioned the ann□lar. R□n to □ottom with the core □□L□to 1245m. Wa□hed 2 □in□le□to □ottom and circ□lated □ottom□ □p. Dropped the □all and c□t core □7 from 1270m to 1302m. (□ammed Off). Break core and circ□late on top of the core □t□mp. Attemped to core ahead. Cir□lated □ottom□ □p and then p□mped a wei□hted pill. P□lled o□t of the hole to recover core. At □□rface recovered 32m of core from core □arrel□. Held □afety meetin□ prior to Laydown core □arrel□, F□nction □lind ram□and flow check o□t of the hole. Held □afety meetin□ with Directional □Ri□Crew □H□□ky rep prior to pick□p directional tool□. Pick□p Phoenix Directional Tool□7/8 Lo□e 3 Sta□e motor □et at 1.50 de□Bent Ho□□in□with MWD□Gamma and RIH W/Directional Tool□.

Remark□

No Accident□, Incident□or Enviromental Concern□.

Direction□to the location. From Norman Well□, Take the winter road □o□th for approx 34.4km. T□rn ri□ht and □o thro□□h the □ec□rity. Contin□e on the H□□ky Winter Rd to the H□□ky Camp Site. Contin□e on the H□□ky Winter Rd to km 44 T□rn left and contin□e to km 46. Keep left and □o to location at km 47. All road□are RADIO CONTROLLED.

Tank Farm delivered for Little Bear H-64
Ba□e Oil Delivered today □ 0m3, Total at Tank Farm □ 27m3.
Invert Delivered today □ 0m3, Total at Tank Farm □176.8m3

Daily invert lo□□e□: 0.0m3
Total invert lo□□e□: 29.1m3

Daily Contacts

Type	Contact Name	Title	Mo□ile
Office	Kim Richard□on	DR S□perintendent	403-542-1059
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Office	Sandeep Randhawa	DR En□	403-519-5660
Office	Darren Brown	Con□tr□ction S□per	
Well Site S□pervi□or	Cal Conklin	DR Field S□per	403-502-3387
Well Site S□pervi□or	Woody Periard	DR Field S□per	403-350-6027
Well Site S□pervi□or	Dan He□□dorfer	DR Field S□per	780-446-5160
Ri□Mana□er	Troy Pre□□□	Ri□Mana□er	

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
00:00	1.75	1.75	01:45	4	CORING				CONTINUE TO MAKE UP BARRELS
01:45	3.00	4.75	04:45	6	TRIPS				RUN IN WITH CORE □7 30M PER /MIN FLOW CHECK AT 489M FILL PIPE
04:45	0.25	5.00	05:00	7	RIG SERVICE				RIG SERVICE F/T ANNULAR 6 SEC C/O
05:00	1.25	6.25	06:15	5	COND MUD □ CIRC				WASH IN FR 1245M-TO-1270M CIRCULATE BOTTOMS UP,WITH HSE AT SHAKER
06:15	5.75	12.00	12:00	4	CORING				CUT CORE F/ 1270M - 1302.85M
12:00	0.25	12.25	12:15	5	COND MUD □ CIRC				CONDITION MUD □ CIRCULATE
12:15	0.50	12.75	12:45	4	CORING				CUT CORE F/ 1302.85 - 1302.95M
12:45	1.00	13.75	13:45	5	COND MUD □ CIRC				CONDITION MUD □ CIRCULATE
13:45	3.25	17.00	17:00	6	TRIPS				TRIPS POOH FLOW CHECK □ 1297M, 1242M, 650M, 182M, 71M
17:00	0.25	17.25	17:15	21	SAFETY MEETING				SAFETY MEETING WITH CORE HANDS ON HANDLING CORE
17:15	1.75	19.00	19:00	4	CORING				HANDLE CORE BRLS , CORE BARRELS LAY DOWN CORE □7
19:00	0.25	19.25	19:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING W/ RIG CREW□RM□HUSKY REP
19:15	0.25	19.50	19:30	21	SAFETY MEETING				PRE-□OB SAFETY WITH BAKER
19:30	1.75	21.25	21:15	4	CORING				HANDLE CORE BRLS CNT TO RECOVER AND LAY DOWN CORE BARRELS

Co□t O□ect N□m□er	Ori□ AFE S□p Am
US-51822-EX-02-DR-ID	11,529,266.00

Primary □o□Type: Initial Drillin□

Start Date	End Date
2/17/2012	3/10/2012
Final Stat□□: Drilled □ Ca□ed	Sp□d Date: 2/19/2012 11:30
Daily Co□t Total: 1,379,044.44	C□m Co□t To Date: 4,398,330.29
Daily M□d Co□t: 653.94	M□d Additive Co□t To Date: 125,845.05
Depth Start (mKB): 1,270.00	Depth End (mKB): 1,302.00

La□t Ca□in□Strin□: S□rface, 510.00mKB

Depth Pro□re□□(m): 32.00

Depth Start (TVD) (mKB)	Depth End (TVD) (mKB)
1,269.79	1,301.79
Tar□et Formation: Canol	E□t Total Depth (mKB): 1,412.00
Per□onnel Total Ho□r□(hr□): 540.00	C□m Per□Tot Hr (hr□): 9,580.00
Time Lo□Total Ho□r□(hr□): 24.00	Pro□lem Time Ho□r□(hr□)
Pro□lem Time (□)	C□m Pro□lem Time (□)
Day□LTI (day□)	Day□RI (day□)

Personnel Log

Company	Co□nt	Tot Time (hr□)
Na□or□Drillin□ Limited	15	180.00
Mi Swaco	1	12.00
Apex Oilfield Service□ 2000 Inc.	1	12.00
R G Mallett Oilfield Enterpri□e□	1	12.00
He□□dorfer Con□□ltin□ Ltd.	1	12.00
Mc□rath Re□o□rce Con□□ltin□Ltd.	1	12.00
Hori□on North Camp□□ Cat	5	60.00
□NEW VENDOR□	2	24.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	2	24.00
Continental La□oratorie□	2	24.00
H□e Inte□rated Ltd.	1	12.00
Frontier	1	12.00
Phoenix Technolo□y Service□LP	2	24.00
Baker H□□he□	2	24.00
H□□ky	2	24.00
□NEW VENDOR□	1	12.00
Baker Atla□	3	36.00

Safety Check Summary

Type	La□t Date	Next Date
Safety Meetin□	3/5/2012	3/6/2012

Rigs

Contractor	Ri□N□m□er
Na□or□Drillin□	23
Ri□S□pervi□or	Phone Mo□ile
Troy Pre□□□	

Ri□Relea□e Date: 3/10/2012 23:59

Mud Pumps

 # 1, GARDNER DENVER, PZ8

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	203.0
Liner Si□e (mm)	Vol/Stk OR (m□/□tk)	
152.0	0.011	
Pre□(kPa)	Slow Spd	Stroke□(□p...	Eff (□)
		0	

 # 2, CONTINENTAL EMSCO, F800

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	229.0
Liner Si□e (mm)	Vol/Stk OR (m□/□tk)	
152.0	0.013	
Pre□(kPa)	Slow Spd	Stroke□(□p...	Eff (□)
2,200	Ye□	59	95

Mud Additive Amounts

De□cription	Co□t (/□nit)	Con□□med
FED WATE (BARITE)	15.57	42.0

Survey Data

MD (mKB)	Incl (°)	A□m (°)	TVD (mKB)

Report Printed: 6/4/2012

Well Name: HUSKY LITTLE BEAR H-64

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
21:15	0.25	21.50	21:30	21	SAFETY MEETING				PRE-□OB SAFETY PRIOR TO MAKE UP DIR TOOLS
21:30	1.25	22.75	22:45	20	DIR. WORK				PICK UP DIRECTIONAL TOOLS
22:45	0.25	23.00	23:00	7	RIG SERVICE				RIG SERVICE F/T BLIND RAMS OUT OF HOLE 4 SEC C/O
23:00	1.00	24.00	00:00	6	TRIPS				RUN IN HOLE W/DIRECTIONAL TOOLS TO/550M

Last 5 Formations

Formation Name	Pro□ Top (TVD) (mKB)	Drill Top MD (mKB)

Hole Size (mm)

Max Nominal OD (mm)
244.5

Mud Checks

Type	Time	Depth (mKB)	Den□ity (k□/m□)	Vi□ (□/L)	Pla□tic Vi□c (cp)	Yield Point (Pa)
Invert	13:30	1,302.00	1225.0	48	13.0	4.000

Gel 10 □ec (Pa)	Gel 10 min (Pa)	Gel 30 min (Pa)	Filtrate (mL/30min)	Filter Cake (mm)	pH	Solid□ (□)
3.500	7.500	12.000				13.1

MBT (k□/m□)	Percent Oil (□)	Percent Water (□)	Chloride□ (m□/L)	Calci□m (m□/L)	Pota□□i□m (m□/L)	Electric Sta□ (V)
	82.0	18.0	266,597.003			1092.0

Whole M□d Added (m□)	M□d Lo□t to Hole (m□)	M□d Lo□t to S□rface (m□)	Re□erve M□d Vol□me (m□)	Active M□d Vol□me (m□)
	0.00	0.00	119.90	80.10

Drill Strings

BHA #11, Drilling Assembly

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)
11	222.0mm, 406C, 7134558	HUGHES	1-1-WT-A-X-0.00-NO-BHA	

No□□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...
	1,302.00		5.6

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread
Kelly	1	170.0	68.0	4.57	
Drill Pipe	1	101.6	70.0	9.29	
Drill pipe - Stand□	60	101.6	70.0	1,115.05	
8-HWDP	1	101.6	68.0	72.64	
X/O	1	165.0	49.0	0.71	
4-DRILL COLLARS	1	165.0	49.0	37.93	
PUMP OUT SUB	1	157.0	58.0	1.02	
FLOAT X/O	1	157.0	58.0	0.46	
1-LEE □ARS	1	171.0	72.0	2.15	
6- CORE BARRELS	1	171.0	137.0	57.74	

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
Ori□inal Hole, 300H6465...	1,270.00	1,302.00	32.00	5.75	5.75	5.6	1.200

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
4,000	55	7,080	32,000	33,000	31,000	3,600.0	648.0

□ (□in) (m□/min)	T (In) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

Kick/Lost Circ

Occ□r Date	Occ□r Depth (mKB)	Control Date	Control Depth (mKB)	Incident Type

Comment

Casing Strings

Ca□in□ De□cription	R□n Date	Set Depth (mKB)

Comment

Casing Components

Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...

Daily Drilling - Detail (legal size)

Report Start Date: 3/6/2012
Report #: 19, DFS: 16.52
Depth Progress: 39.00

Well Name: HUSKY LITTLE BEAR H-64

Licen□ed UWI	S□rface Le□al Location	Licen□e No.	State/Province
300H64650012600	300H64650012600	462	N.W.T

So□r Cla□□	ERP Re□□ired	Lahee Cla□□ification	B□□ine□□Unit
Sweet	No	TH (C)	Canada Frontier - Exploration

Initial Gro□nd Elevation (m)	C□t/Fill (m)	Gro□nd Elv. (m)	KB Elevation (m)	KB to Gnd (m)
178.00	0.0	178.00	183.20	5.20

KB-Ca□in□Flan□e Di□tance (m)	KB-T□□in□Head Di□tance (m)	Total Depth All (TVD) (mKB)
5.47	5.00	Ori□inal Hole - 1340.8

Primary Well□ore Affected: Ori□inal Hole, 300H64650012600

Weather	Temperat□re (°C)	Road Condition	Hole Condition
Overca□t	-25	Fair	Good

Operation□at Report Time: Lo□□in□with Baker Atla□.

Operation□Next Report Period: Lo□w/Baker Atla□, R□n in the hole with pipe etc.

Operation□□ 06:00: Lo□□in□with Baker Atla□.

Operation□S□mmary: RIH W/Phoenix Directional Tool□7/8 Lo□e 3 Sta□e motor □et at 1.50 de□ Bent Ho□□in□with MWD□Gamma to 1267m, Circ□late □ottom□□p and then □e□in to wa□h in F/1267m to/1302m and lo□□in□□amma at the □ame time. Drill ahead 222mm Hole F/1302m To/1341m TD. Circ□late two □ottom□□p, circ□late hole clean. Wiper trip 10 □tand□and once □ack on □ottom circ□late work pipe condition hole prior to Trip o□t with directional tool□and □trap o□t of the hole (tally □1341.00m, □trap □1340.20m, Diff □0.80m). Held □afety meetin□w/Directional □Ri□Crew □H□□ky Rep prior to laydown directional tool□. F□nction Blind ram□and flow check. Held □afety meetin□ with Baker Atla□Lo□□er□□Ri□Crew □H□□ky Rep prior to ri□□p to lo□. R□n □1 (HDIL, XMAC, ZDL, CN) Lo□□er□□ottom hole depth □1340.56m. Monitor well all the time while lo□□in□. Held all □afety crew chan□e meetin□□with □oth crew□, Ri□ Mana□er□□H□□ky Rep□.

Remark□

No Accident□, Incident□or Enviromental Concern□.

Direction□to the location. From Norman Well□, Take the winter road □o□th for approx 34.4km. T□rn ri□ht and □o thro□□h the □ec□rity. Contin□e on the H□□ky Winter Rd to the H□□ky Camp Site. Contin□e on the H□□ky Winter Rd to km 44 T□rn left and contin□e to km 46. Keep left and □o to location at km 47. All road□are RADIO CONTROLLED.

Tank Farm delivered for Little Bear H-64
Ba□e Oil Delivered today □ 0m3, Total at Tank Farm □ 27m3.
Invert Delivered today □ 0m3, Total at Tank Farm □176.8m3

Daily invert lo□□e□: 1.4m3
Total invert lo□□e□: 30.5m3

Daily Contacts

Type	Contact Name	Title	Mo□ile
Office	Kim Richard□on	DR S□perintendent	403-542-1059
Office	Goly Zila□i	DR En□	403-462-8021
Office	Sandeep Randhawa	DR En□	403-519-5660
Office	Darren Brown	Con□tr□ction S□per	
Well Site S□pervi□or	Cal Conklin	DR Field S□per	403-502-3387
Well Site S□pervi□or	Woody Periard	DR Field S□per	403-350-6027
Well Site S□pervi□or	Dan He□□dorfer	DR Field S□per	780-446-5160
Ri□Mana□er	Troy Pre□□□	Ri□Mana□er	

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
00:00	2.25	2.25	02:15	6	TRIPS				CONTINUE TO RUN IN HOLE W/DIRECTIONAL TOOLS
02:15	0.75	3.00	03:00	5	COND MUD □ CIRC				CIRCULATE A BOTTOMS UP WITH HSE PRESENT
03:00	2.50	5.50	05:30	20	DIR. WORK				DIRECTIONAL WORK ,LOG GAMMA WASH TO BOTTOM, F/1267M-TO-1302M
05:30	0.25	5.75	05:45	7	RIG SERVICE				RIG SERVICE F/T ANNULAR 6 SEC C/O
05:45	1.25	7.00	07:00	2	DRILL				DRILL 222MM HOLE FR 1302M-TO- 1314M
07:00	0.25	7.25	07:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING W/ RIG CREW□RM□HUSKY REP
07:15	3.50	10.75	10:45	2	DRILL				DRILL 222MM HOLE FR 1314M TO 1341M
10:45	1.00	11.75	11:45	5	COND MUD □ CIRC				CIRCULATE CLEAN HOLE PRIOR TO WIPER TRIP
11:45	0.25	12.00	12:00	6	TRIPS				WIPER TRIP 10 STANDS FLOW CHECKS □ 1328M
12:00	0.50	12.50	12:30	6	TRIPS				TRIP OUT OF HOLE WIPER TRIP 10 STANDS , FLOW CHECKS □ 1144M CAL .50 M3 MERS .97 M3 □ DIFF .47 M3
12:30	0.50	13.00	13:00	6	TRIPS				TRIP IN HOLE RUN 10 STANDS TO BOTTOM
13:00	1.50	14.50	14:30	5	COND MUD □ CIRC				CIRC COND HOLE PRIOR TO PULL OUT TO LOG
14:30	3.00	17.50	17:30	6	TRIPS				TRIP OUT OF HOLE TO LOG WELL ,PUMP PILL , FLOW CHECKS □ 1328M, 1264M, 674M, 159M OUT OF HOLE .. CAL 4.62 M3 - MERS 6.81 M3 □ DIFF 2.19 M3

Co□t O□ect N□m□er	Ori□ AFE S□p Am
US-51822-EX-02-DR-ID	11,529,266.00

Primary □o□Type: Initial Drillin□

Start Date	End Date
2/17/2012	3/10/2012
Final Stat□□: Drilled □ Ca□ed	Sp□d Date: 2/19/2012 11:30
Daily Co□t Total: 122,713.94	C□m Co□t To Date: 4,521,044.23
Daily M□d Co□t: 653.94	M□d Additive Co□t To Date: 126,498.99
Depth Start (mKB): 1,302.00	Depth End (mKB): 1,341.00

La□t Ca□in□Strin□: S□rface, 510.00mKB

Depth Pro□re□□(m): 39.00

Depth Start (TVD) (mKB)	Depth End (TVD) (mKB)
1,301.79	1,340.79
Tar□et Formation: Canol	E□t Total Depth (mKB): 1,412.00
Per□onnel Total Ho□r□(hr□): 564.00	C□m Per□Tot Hr (hr□): 10,144.00
Time Lo□Total Ho□r□(hr□): 24.00	Pro□lem Time Ho□r□(hr□)
Pro□lem Time (□)	C□m Pro□lem Time (□)
Day□LTI (day□)	Day□RI (day□)

Personnel Log

Company	Co□nt	Tot Time (hr□)
Na□or□Drillin□Limited	15	180.00
Mi Swaco	1	12.00
Apex Oilfield Service□ 2000 Inc.	1	12.00
R G Mallett Oilfield Enterpri□e□	1	12.00
He□□dorfer Con□□ltin□ Ltd.	1	12.00
Mc□rath Re□o□rce Con□□ltin□Ltd.	1	12.00
Hori□on North Camp□□ Cat	5	60.00
□NEW VENDOR□	2	24.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	2	24.00
Continental La□oratorie□	2	24.00
H□e Inte□rated Ltd.	1	12.00
Frontier	1	12.00
Phoenix Technolo□y Service□LP	2	24.00
Baker H□□he□	2	24.00
H□□ky	2	24.00
□NEW VENDOR□	1	12.00
Baker Atla□	5	60.00

Safety Check Summary

Type	La□t Date	Next Date
Safety Meetin□	3/6/2012	3/7/2012

Rigs

Contractor	Ri□N□m□er
Na□or□Drillin□	23
Ri□S□pervi□or: Troy Pre□□□	Phone Mo□ile

Ri□Relea□e Date: 3/10/2012 23:59

Mud Pumps

 # 1, GARDNER DENVER, PZ8

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	203.0
Liner Si□e (mm): 152.0		Vol/Stk OR (m□/□tk): 0.011
Pre□(kPa)	Slow Spd	Stroke□(□p...
		0

Eff (□)

 # 2, CONTINENTAL EMSCO, F800

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	229.0
Liner Si□e (mm): 152.0		Vol/Stk OR (m□/□tk): 0.013

Pre□(kPa)	Slow Spd	Stroke□(□p...	Eff (□)
2,000	Ye□	55	95

Mud Additive Amounts

De□cription	Co□t (/□nit)	Con□□med
FED WATE (BARITE)	15.57	42.0

Survey Data

MD (mKB)	Incl (°)	A□m (°)	TVD (mKB)
1,289.96	0.50	114.50	1,289.75
1,326.83	0.40	129.70	1,326.62

Well Name: HUSKY LITTLE BEAR H-64

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
17:30	0.25	17.75	17:45	21	SAFETY MEETING				SAFETY MEETING WITH DIRECTIONAL HANDS ON WORKING WITH THERE TOOLS
17:45	0.75	18.50	18:30	6	TRIPS				LAY DOWN DIRECTIONAL TOOLS
18:30	0.25	18.75	18:45	21	SAFETY MEETING				SAFETY MEETING WITH LOGGERS ON PICKING UP LOGGING TOOLS
18:45	0.25	19.00	19:00	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING W/ RIG CREW□RM□HUSKY REP
19:00	5.00	24.00	00:00	11	WIRELINE LOGS				LOGGING - OPEN HOLE LOGS, RIG TO LOG, MONITOR WELL CONSTANTALLY, LOGGING RUN □1 (HDIL,XMAC,ZDL,CN,GR)

Last 5 Formations

Formation Name	Pro□ Top (TVD) (mKB)	Drill Top MD (mKB)

Hole Size (mm)

Max Nominal OD (mm)
244.5

Mud Checks

Type	Time	Depth (mKB)	Den□ity (k□/m□)	Vi□ (□/L)	Pla□tic Vi□c (cp)	Yield Point (Pa)
Invert	13:30	1,341.00	1240.0	46	14.0	3.500
Gel 10 □ec (Pa)	**Gel 10 min (Pa)**	**Gel 30 min (Pa)**	**Filtrate (mL/30min)**	**Filter Cake (mm)**	**pH**	**Solid□ (□)**
3.500	7.500	12.500				14.2
MBT (k□/m□)	Percent Oil (□)	Percent Water (□)	Chloride□ (m□/L)	Calci□m (m□/L)	Pota□i□m (m□/L)	Electric Sta□ (V)
	82.0	18.0	261,449.010			1097.0

Whole M□d Added (m□)	M□d Lo□t to Hole (m□)	M□d Lo□t to S□rface (m□)	Re□erve M□d Vol□me (m□)	Active M□d Vol□me (m□)
10.00	1.10	0.60	119.20	79.50

Drill Strings

BHA #13, Drilling Assembly

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)
12 RR	222.0mm, Mi516, □D1380	SMITH	1-1-WT-A-X-0.00-NO-LOG	

No□□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...
	1,341.00		8.2

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread
Kelly		170.0	68.0	11.77	
Drill pipe - Sin□le□	1	101.6	70.0	9.22	
Drill pipe - Stand□	63	101.6	70.0	1,171.72	
HWDP(4.0 IN)	8	101.6	68.0	72.64	
X/O	1	165.0	73.0	0.71	
DC (6.25 IN)	2	165.0	58.0	18.97	
□ARS-HYD/MECH	1	163.0	71.0	6.97	
DC (6.25 IN)	2	165.0	58.0	18.96	
PUMPOUT SUB	1	157.0	58.0	1.02	
MONEL	2	167.0	73.0	18.89	
UBHO	1	164.0	73.0	0.92	
MOTOR HS	1	166.0	58.0	8.97	

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
Ori□inal Hole, 300H6465...	1,302.00	1,341.00	39.00	4.75	4.75	8.2	1.450

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
6,000	35	9,700	37,000	39,000	35,000	4,200.0	650.0

□ (□in) (m□/min)	T (In) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

Kick/Lost Circ

Occ□r Date	Occ□r Depth (mKB)	Control Date	Control Depth (mKB)	Incident Type

Comment

Casing Strings

Ca□in□ De□cription	R□n Date	Set Depth (mKB)

Comment

Casing Components

Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...

Husky Energy — Daily Drilling - Detail (legal size)

Report Start Date: 3/7/2012
Report #: 20, DFS: 17.52
Depth Progress: 0.00

Well Name: HUSKY LITTLE BEAR H-64

Licen□ed UWI	S□rface Le□al Location	Licen□e No.	State/Province
300H64650012600	300H64650012600	462	N.W.T

So□r Cla□□	ERP Re□□ired	Lahee Cla□□ification	B□□ine□□ Unit
Sweet	No	TH (C)	Canada Frontier - Exploration

Initial Gro□nd Elevation (m)	C□t/Fill (m)	Gro□nd Elv. (m)	KB Elevation (m)	KB to Gnd (m)
178.00	0.0	178.00	183.20	5.20

KB-Ca□in□ Flan□e Di□tance (m)	KB-T□□in□ Head Di□tance (m)	Total Depth All (TVD) (mKB)
5.47	5.00	Ori□inal Hole - 1340.8

Primary Well□ore Affected: Ori□inal Hole, 300H64650012600

Weather	Temperat□re (°C)	Road Condition	Hole Condition
Overca□t	-25	Fair	Good

Operation□at Report Time: Lo□□in□ with Baker Atla□.

Operation□Next Report Period: Lo□w/Baker Atla□, RIH W/222mm Bit, Circ hole clean, Pooh laydown DP keep 500m in derrick, Ri□to r□n c□□.

Operation□□ 06:00: RIH W/222mm Bit

Operation□S□mmary: Lo□□in□w/Baker Atla□, Laydown R□n □2 tool□and Make □p R□n □3 (Flex, Mrex, DSL) Thi□third r□n wa□at □□rface □ 23:30 hr□, Had to make □p r□n □4 for a repeat (Flex, DSL). Held all □afety crew chan□e meetin□□with □oth crew□, Ri□ Mana□er□□ H□□ky Rep□.

Remark□

No Accident□, Incident□or Enviromental Concern□.

Direction□to the location. From Norman Well□, Take the winter road □o□th for approx 34.4km. T□rn ri□ht and □o thro□□h the □ec□rity. Contin□e on the H□□ky Winter Rd to the H□□ky Camp Site. Contin□e on the H□□ky Winter Rd to km 44 T□rn left and contin□e to km 46. Keep left and □o to location at km 47. All road□are RADIO CONTROLLED.

Tank Farm delivered for Little Bear H-64
Ba□e Oil Delivered today □ 0m3, Total at Tank Farm □ 27m3.
Invert Delivered today □ 0m3, Total at Tank Farm □176.8m3

Daily invert lo□□e□: 0m3
Total invert lo□□e□: 30.5m3

Daily Contacts

Type	Contact Name	Title	Mo□ile
Office	Kim Richard□on	DR S□perintendent	403-542-1059
Office	Goly Zila□i	DR En□	403-462-8021
Office	Sandeep Randhawa	DR En□	403-519-5660
Office	Darren Brown	Con□tr□ction S□per	
Well Site S□pervi□or	Woody Periard	DR Field S□per	403-350-6027
Well Site S□pervi□or	Dan He□□dorfer	DR Field S□per	780-446-5160
Ri□ Mana□er	Troy Pre□□□	Ri□ Mana□er	

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
00:00	3.25	3.25	03:15	11	WIRELINE LOGS				LOGGING W/BAKER ATLAS, RUN □1 (HDIL, XMAC, ZDL, CN, GR)
03:15	3.75	7.00	07:00	11	WIRELINE LOGS				LOGGING W/BAKER ATLAS, RUN □2 (CBIL, EI, ORIT)
07:00	0.25	7.25	07:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING W/ RIG CREW□RM□HUSKY REP
07:15	4.75	12.00	12:00	11	WIRELINE LOGS				LOGGING W/BAKER ATLAS, RUN □2 (CBIL, EI, ORIT)
12:00	6.75	18.75	18:45	11	WIRELINE LOGS				LOGGING W/BAKER ATLAS, RUN □3 (FLEX, MREX, DSL)
18:45	0.25	19.00	19:00	7	RIG SERVICE				RIG SERVES CHECK DRIVE TRAN AND GREASE
19:00	0.25	19.25	19:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING W/ RIG CREW□RM□HUSKY REP
19:15	4.25	23.50	23:30	11	WIRELINE LOGS				WIRELINE LOGS W/BAKER ATLAS □3 (FLEX, MREX, DSL)
23:30	0.50	24.00	00:00	11	WIRELINE LOGS				WIRELINE LOGS MAKE UP RUN □4 (FLEX, DSL)

Mud Checks

Type	Time	Depth (mKB)	Den□ity (k□/m□)	Vi□ (□/L)	Pla□tic Vi□c (cp)	Yield Point (Pa)

Gel 10 □ec (Pa)	Gel 10 min (Pa)	Gel 30 min (Pa)	Filtrate (mL/30min)	Filter Cake (mm)	pH	Solid□(□)

MBT (k□/m□)	Percent Oil (□)	Percent Water (□)	Chloride□(m□/L)	Calci□m (m□/L)	Pota□□i□m (m□/L)	Electric Sta□(V)

Whole M□d Added (m□)	M□d Lo□t to Hole (m□)	M□d Lo□t to S□rface (m□)	Re□erve M□d Vol□me (m□)	Active M□d Vol□me (m□)

Drill Strings

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)

No□le□(mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread

Co□t O□□ect N□m□er	Ori□ AFE S□p Am
US-51822-EX-02-DR-ID	11,529,266.00

Primary □o□Type: Initial Drillin□

Start Date	End Date
2/17/2012	3/10/2012
Final Stat□□	**Sp□d Date**
Drilled □ Ca□ed	2/19/2012 11:30
Daily Co□t Total	**C□m Co□t To Date**
1,178,240.00	5,699,284.23
Daily M□d Co□t	**M□d Additive Co□t To Date**
	126,498.99
Depth Start (mKB)	**Depth End (mKB)**
1,341.00	1,341.00

La□t Ca□in□Strin□: S□rface, 510.00mKB

Depth Pro□re□□(m): 0.00

Depth Start (TVD) (mKB)	Depth End (TVD) (mKB)
1,340.79	1,340.79
Tar□et Formation	**E□t Total Depth (mKB)**
Canol	1,412.00
Per□onnel Total Ho□r□(hr□)	**C□m Per□Tot Hr (hr□)**
552.00	10,696.00
Time Lo□Total Ho□r□(hr□)	**Pro□lem Time Ho□r□(hr□)**
24.00	
Pro□lem Time (□)	**C□m Pro□lem Time (□)**
Day□LTI (day□)	**Day□RI (day□)**

Personnel Log

Company	Co□nt	Tot Time (hr□)
Na□or□Drillin□ Limited	15	180.00
Mi Swaco	1	12.00
Apex Oilfield Service□ 2000 Inc.	1	4.00
R G Mallett Oilfield Enterpri□e□	1	12.00
Sor□□Con□□ltin□ (1995) L	1	12.00
He□□dorfer Con□□ltin□ Ltd.	1	12.00
Mc□rath Re□o□rce Con□□ltin□ Ltd.	1	12.00
Hori□on North Camp□□ Cat	5	60.00
□NEW VENDOR□	2	24.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	2	24.00
Continental La□oratorie□	2	24.00
H□e Inte□rated Ltd.	1	12.00
Frontier	1	12.00
Phoenix Technolo□y Service□LP	2	24.00
Baker H□□he□	2	8.00
H□□ky	2	24.00
□NEW VENDOR□	1	12.00
Baker Atla□	5	60.00

Safety Check Summary

Type	La□t Date	Next Date
Safety Meetin□	3/7/2012	3/8/2012

Rigs

Contractor	Ri□ N□m□er
Na□or□Drillin□	23
Ri□ S□pervi□or	**Phone Mo□ile**
Troy Pre□□□	

Ri□ Relea□e Date: 3/10/2012 23:59

Mud Pumps

 # 1, GARDNER DENVER, PZ8

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	203.0
Liner Si□e (mm)	**Vol/Stk OR (m□/□tk)**	
152.0	0.011	
Pre□(kPa)	**Slow Spd**	**Stroke□(□p...** / **Eff (□)**
		0

 # 2, CONTINENTAL EMSCO, F800

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	229.0
Liner Si□e (mm)	**Vol/Stk OR (m□/□tk)**	
152.0	0.013	
Pre□(kPa)	**Slow Spd**	**Stroke□(□p...** / **Eff (□)**
		0

Mud Additive Amounts

De□cription	Co□t (/□nit)	Con□□med

Report Printed: 6/4/2012

Well Name: HUSKY LITTLE BEAR H-64

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
□ (□in□) (m□/min)	T (In□) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

Kick/Lost Circ

Occ□r Date	Occ□r Depth (mKB)	Control Date	Control Depth (mKB)	Incident Type

Comment

Casing Strings

Ca□in□ De□cription	R□n Date	Set Depth (mKB)

Comment

Casing Components

Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...

Survey Data

MD (mKB)	Incl (°)	A□m (°)	TVD (mKB)

Last 5 Formations

Formation Name	Pro□ Top (TVD) (mKB)	Drill Top MD (mKB)

Hole Size (mm)

Max Nominal OD (mm)
244.5

Husky Energy — Daily Drilling - Detail (legal size)

Report Start Date: 3/8/2012
Report #: 21, DFS: 18.52
Depth Progress: 0.00

Well Name: HUSKY LITTLE BEAR H-64

Licen□ed UWI	S□rface Le□al Location	Licen□e No.	State/Province
300H64650012600	300H64650012600	462	N.W.T

So□r Cla□□	ERP Re□□ired	Lahee Cla□□fication	B□□ine□□Unit
Sweet	No	TH (C)	Canada Frontier - Exploration

Initial Gro□nd Elevation (m)	C□t/Fill (m)	Gro□nd Elv. (m)	KB Elevation (m)	KB to Gnd (m)
178.00	0.0	178.00	183.20	5.20

KB-Ca□in□ Flan□e Di□tance (m)	KB-T□□in□Head Di□tance (m)	Total Depth All (TVD) (mKB)
5.47	5.00	Ori□inal Hole - 1340.8

Primary Well□ore Affected: Ori□inal Hole, 300H64650012600

Weather	Temperat□re (°C)	Road Condition	Hole Condition
Snowin□	-18	Fair	Good

Operation□at Report Time
R□n 177.8mm Ca□in□.

Operation□Next Report Period
R□n 177.8mm c□□, Circ c□□, Cement c□□, Wait on cement 6 hr□, Set c□□ □lip□in ten□ion, C□t c□□, Lay o□t Bop, In□tall well head, R□n □rid□e pl□□□et.

Operation□□ 06:00
Cement 177.8mm Ca□in□.

Operation□S□mmary
Lo□□in□w/Baker Atla□, Had to make □p r□n □4 for a repeat (Flex, DSL). Laydown lo□□er□, F□nction □lind ram□and flow check. Make □p 222mm Bit and trip in the hole, wa□h 2 □in□le□to □ottom. Circ□late work pipe clean the hole. POOH keep 500m drill pipe in the derrick and laydown drill pipe. At □□rface p□ll wear □□□hin□, Safety meetin□with Hallmark Power ton□□operator□.
Ran : Float □hoe, 2-□oint□c□□, Float collar, 116 □oint□of 177.8mm / 34.23 k□/m / L-80 / LT□C / New □indal ca□in□, Total Len□th □1342.13m, Shoe □et □ 1341m/KB. Float □ 1317.75m. ID □161.7mm.

Remark□
No Accident□, Incident□or Enviromental Concern□.

Direction□to the location. From Norman Well□, Take the winter road □o□th for approx 34.4km. T□rn ri□ht and □o thro□□h the □ec□rity. Contin□e on the H□□ky Winter Rd to the H□□ky Camp Site. Contin□e on the H□□ky Winter Rd to km 44 T□rn left and contin□e to km 46. Keep left and □o to location at km 47. All road□are RADIO CONTROLLED.

Tank Farm delivered for Little Bear H-64
Ba□e Oil Delivered today □ 0m3, Total at Tank Farm □ 22m3.
Invert Delivered today □ 0m3, Total at Tank Farm □35.8m3
Sent o□t today □ 60.0m3, with Pro North to FT.Nel□on, B.C.

Daily invert lo□□e□: 0.5m3
Total invert lo□□e□: 31.0m3

Daily Contacts

Type	Contact Name	Title	Mo□ile
Office	Kim Richard□on	DR S□perintendent	403-542-1059
Office	Goly Zila□i	DR En□	403-462-8021
Office	Sandeep Randhawa	DR En□	403-519-5660
Office	Darren Brown	Con□tr□ction S□per	
Well Site S□pervi□or	Woody Periard	DR Field S□per	403-350-6027
Well Site S□pervi□or	Dan He□□dorfer	DR Field S□per	780-446-5160
Ri□ Mana□er	Troy Pre□□□	Ri□ Mana□er	

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
00:00	5.25	5.25	05:15	11	WIRELINE LOGS				WIRELINE LOGS / BAKER ATLAS RUN □4 (FLEX, DSL)
05:15	0.25	5.50	05:30	7	RIG SERVICE				RIG SERVICE F/T BLIND RAMS OUT OF HOLE
05:30	1.50	7.00	07:00	6	TRIPS				RUN IN HOLE FL□OW CHECK AND FILL PIPE AT CASING SHOE TRIP SPEED 30-35 METERS PER MIN AS PER HUSKY CONSULTANTS
07:00	0.25	7.25	07:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING W/ RIG CREW□RM□HUSKY REP
07:15	1.75	9.00	09:00	6	TRIPS				TRIP IN HOLE PICK UP SINGLES TO MAKE UP FOR TOOLS WASH 2 SINGLES TO BOTTOM
09:00	1.50	10.50	10:30	5	COND MUD □ CIRC				CIRCULATE AND CONDITION TO COME OUT SIDEWAYS
10:30	1.50	12.00	12:00	6	TRIPS				TRIP OUT OF HOLE PULL 27 STANDS FOR BRIDGE PLUG FLOW CHECKS □ 1336M, 1281M, 857M
12:00	0.25	12.25	12:15	21	SAFETY MEETING				SAFETY MEETING ON LAYING DOWN STRING
12:15	1.25	13.50	13:30	6	TRIPS				LAY DOWN DRILL PIPE AND COLLARS FLOW CHECKS □ 691M,491M
13:30	0.25	13.75	13:45	21	SAFETY MEETING				SAFETY MEETING ON BRAKING KELLY DOWN AND FLUSHING
13:45	0.75	14.50	14:30	25					FLUSH AND BRAKE KELLY DOWN
14:30	1.75	16.25	16:15	6	TRIPS				LAY DOWN DRILL PIPE AND COLLARS FLOW CHECKS □ 120M, OUT OF HOLE, CAL 4.33 M3 - MESR 6.50 M3 □DIFF 2.17 M3

Co□t O□□ect N□m□er	Ori□ AFE S□p Am
US-51822-EX-02-DR-ID	11,529,266.00

Primary □o□Type: Initial Drillin□

Start Date	End Date
2/17/2012	3/10/2012
Final Stat□□: Drilled □ Ca□ed	Sp□d Date: 2/19/2012 11:30
Daily Co□t Total: 272,647.51	C□m Co□t To Date: 5,971,931.74
Daily M□d Co□t: 4,636.51	M□d Additive Co□t To Date: 131,135.50
Depth Start (mKB): 1,341.00	Depth End (mKB): 1,341.00

La□t Ca□in□Strin□: S□rface, 510.00mKB

Depth Pro□re□□(m): 0.00

Depth Start (TVD) (mKB)	Depth End (TVD) (mKB)
1,340.79	1,340.79
Tar□et Formation: Canol	E□t Total Depth (mKB): 1,412.00
Per□onnel Total Ho□r□(hr□): 576.00	C□m Per□Tot Hr (hr□): 11,272.00
Time Lo□Total Ho□r□(hr□): 24.00	Pro□lem Time Ho□r□(hr□)
Pro□lem Time (□)	C□m Pro□lem Time (□)
Day□LTI (day□)	Day□RI (day□)

Personnel Log

Company	Co□nt	Tot Time (hr□)
Na□or□Drillin□ Limited	15	180.00
Mi Swaco	1	12.00
Sor□□Con□□ltin□ (1995) L	1	12.00
He□□dorfer Con□□ltin□ Ltd.	1	12.00
Mc□rath Re□o□rce Con□□ltin□Ltd.	1	12.00
Hori□on North Camp□□ Cat	5	60.00
□NEW VENDOR□	2	24.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	2	24.00
Continental La□oratorie□	2	12.00
H□e Inte□rated Ltd.	1	12.00
Frontier	1	12.00
Phoenix Technolo□y Service□LP	2	24.00
H□□ky	2	24.00
□NEW VENDOR□	1	12.00
Baker Atla□	5	60.00
Hallmark Technical Service	2	24.00
Nor-Chief Con□□ltin□ Service□Ltd.	1	12.00
Stream-Flo Ind□□trie□ Ltd.	1	12.00
Weatherford Completion□Sy□tem□	1	12.00

Safety Check Summary

Type	La□t Date	Next Date
Safety Meetin□	3/8/2012	3/9/2012

Rigs

Contractor	Ri□ N□m□er
Na□or□Drillin□	23
Ri□ S□pervi□or: Troy Pre□□□	Phone Mo□ile

Ri□ Relea□e Date: 3/10/2012 23:59

Mud Pumps

 # 1, GARDNER DENVER, PZ8

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	203.0

Liner Si□e (mm)	Vol/Stk OR (m□/□tk)
152.0	0.011

Pre□ (kPa)	Slow Spd	Stroke□(□p...	Eff (□)
		0	

 # 2, CONTINENTAL EMSCO, F800

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	229.0

Liner Si□e (mm)	Vol/Stk OR (m□/□tk)
152.0	0.013

Pre□ (kPa)	Slow Spd	Stroke□(□p...	Eff (□)
1,225	Ye□	50	95

Mud Additive Amounts

De□cription	Co□t (/□nit)	Con□□med
VERSACOAT HF	900.76	1.0

Report Printed: 6/4/2012

Well Name: HUSKY LITTLE BEAR H-64

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
16:15	0.75	17.00	17:00	25					PULL WEAR BUSHING LAY STUFF DOWN FROM FLOOR WHILE WAITING ON POWER TONG GUYS TO GET HERE
17:00	1.50	18.50	18:30	12	RUN CASING AND CEMENT				RIG UP TO RUN CASING
18:30	0.25	18.75	18:45	21	SAFETY MEETING				SAFETY MEETING WITH POWER TONG GUYS ON RUNNING THERE POWER TONGS
18:45	0.25	19.00	19:00	12	RUN CASING AND CEMENT				RUN CASING MAKE UP SHOE AND FLOAT
19:00	0.25	19.25	19:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING WITH OTHER CREW
19:15	4.75	24.00	00:00	12	RUN CASING AND CEMENT				RUN FLOAT SHOE, 2 □TS CSG, FLOAT COLLAR, 116 □TS OF 177.8mm / 34.23k□/m / L-80 / LT□C / NEW □INDAL CASING, TOTAL LENGTH□1342.13m, SET □ 1341m, FLOAT □ 1317.75m.

Mud Checks

Type	Time	Depth (mKB)	Den□ity (k□/m□)	Vi□ (□/L)	Pla□tic Vi□c (cp)	Yield Point (Pa)
Invert	09:30	1,341.00	1260.0	56	14.0	4.000
Gel 10 □ec (Pa)	**Gel 10 min (Pa)**	**Gel 30 min (Pa)**	**Filtrate (mL/30min)**	**Filter Cake (mm)**	**pH**	**Solid□ (□)**
3.500	8.500	13.500				15.2
MBT (k□/m□)	**Percent Oil (□)**	**Percent Water (□)**	**Chloride□ (m□/L)**	**Calci□m (m□/L)**	**Pota□□i□m (m□/L)**	**Electric Sta□ (V)**
	81.0	19.0	242,164.001			917.0

Whole M□d Added (m□)	M□d Lo□t to Hole (m□)	M□d Lo□t to S□rface (m□)	Re□erve M□d Vol□me (m□)	Active M□d Vol□me (m□)
	0.50	0.00	118.80	79.20

Drill Strings

BHA #13, Drilling Assembly

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)
13RR	222.0mm, EHT11, □R7647	□□L	2-2-WT-A-X-0-NO-TD	380

No□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...
12.7/12.7/12.7	1,341.00		

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread
Kelly	1	170.0	68.0	7.68	
Drill pipe - Stand□	65	101.6	70.0	1,214.20	
HWDP(4.0 IN)	8	101.0	68.0	72.64	
X/O	1	165.0	73.0	0.71	
DC (6.25 IN)	2	165.0	58.0	18.97	
□ARS-HYD/MECH	1	163.0	71.0	6.97	
DC (6.25 IN)	2	165.0	58.0	18.96	
BIT SUB	1	157.0	58.0	0.62	

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
Ori□inal Hole, 300H6465...	1,341.00	1,341.00		0.00			1.450

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
0		8,775	33,000	34,000	32,000	0.0	598.0

□ (□in□) (m□/min)	T (In□) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

Kick/Lost Circ

Occ□r Date	Occ□r Depth (mKB)	Control Date	Control Depth (mKB)	Incident Type

Comment

Casing Strings

Ca□in□ De□cription	R□n Date	Set Depth (mKB)

Comment

Casing Components

Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...

Mud Additive Amounts

De□cription	Co□t (/□nit)	Con□□med
VERSAMUL	862.55	1.0
CLEAN-UP	83.25	8.0
LIME	12.13	10.0
D-D (W/SPOUT)	46.12	10.0
TRUVIS	162.47	10.0

Survey Data

MD (mKB)	Incl (°)	A□m (°)	TVD (mKB)

Last 5 Formations

Formation Name	Pro□ Top (TVD) (mKB)	Drill Top MD (mKB)

Hole Size (mm)

Max Nominal OD (mm)
244.5

Daily Drilling - Detail (legal size)

Report Start Date: 3/9/2012
Report #: 22, DFS: 19.52
Depth Progress: 0.00

Well Name: HUSKY LITTLE BEAR H-64

Licen□ed UWI	S□rface Le□al Location	Licen□e No.	State/Province
300H64650012600	300H64650012600	462	N.W.T

So□r Cla□□	ERP Re□□ired	Lahee Cla□□ification	B□□ine□□ Unit
Sweet	No	TH (C)	Canada Frontier - Exploration

Initial Gro□nd Elevation (m)	C□t/Fill (m)	Gro□□d Elv. (m)	KB Elevation (m)	KB to Gnd (m)
178.00	0.0	178.00	183.20	5.20

KB-Ca□in□ Flan□e Di□tance (m)	KB-T□□in□ Head Di□tance (m)	Total Depth All (TVD) (mKB)
5.47	5.00	Ori□inal Hole - 1340.8

Primary Well□ore Affected
Ori□inal Hole, 300H64650012600

Weather	Temperat□re (°C)	Road Condition	Hole Condition
Snowin□	-23	Fair	Good

Operation□at Report Time	Operation□Next Report Period
Layin□ down Drill Pipe.	P□t Cap on Well Head, Pre□□□re Te□t Brid□e pl□□ to 21,000 kap for 10 min□, Ri□ o□t for move So□th.

Operation□□ 06:00	Operation□S□mmary
Ri□ o□t for move.	Fini□hin□ r□nnin□ 177.8mm ca□in□, wa□h la□t two □t□in and ta□ □ottom □ 1341m. Circ□lated ca□in□ to condition m□d and hole for cementin□. Ri□in Schl□m□er□er cementer□. Safety meetin□ with Schl□m□r□er Cementer□. Cement 177.8mm ca□in□: P□mp 3 m3 M□d P□□h prefl□□h, 1 m3 water to pre□□□re te□t. Lead: 14.8 tonne (19.6 m3) HiLite 1400 □ additive□. Tail: 15.2 tonne□(11.2 m3) G □ additive□. Di□placed w/ 27.8 m3 water with 0.8□ (200 liter□or 10 pail□) KI3908 inhi□itor. Pl□□ down □ 07:00 hr, Mar 9, 2012. 7.0 m3 of □ood cement ret□rn□, and had □ood ret□rn□thro□□h o□t cement □o□. B□mp pl□□ 3,500 kPa over to 13966 kpa, increa□ed after 3 min□to 21,000 kPa held 10 min□te□for pre□□□re te□t on ca□in□. Bleed off, Float□Held. Wait on cement for 6 ho□r□, Pick□p □op and □et ca□in□ □lip□in ten□ion with 32,000 dan with Streamflo tech, c□t ca□in□and nipple down □op□. Dre□□ca□in□and in□tall t□□in□ □pool. Pre□□□re te□t □eal□to 14,000 kPa, (2,000 PSI). held □ood. Safety meetin□ with Weatherford tool tech. Make □p □rid□e pl□□ and r□n in hole on Drill pipe. Tie in Schl□m□r□er and □et □rid□e pl□□ □ 475m KB. Lay down drill pipe. Held all □afety crew chan□e meetin□□with □oth crew□, Ri□ Mana□er□□H□□ky Rep□.

Remark□
No Accident□, Incident□or Enviromental Concern□.

Direction□to the location. From Norman Well□, Take the winter road □o□th for approx 34.4km. T□rn ri□ht and □o thro□□h the □ec□rity. Contin□e on the H□□ky Winter Rd to the H□□ky Camp Site. Contin□e on the H□□ky Winter Rd to km 44 T□rn left and contin□e to km 46. Keep left and □o to location at km 47. All road□are RADIO CONTROLLED.

Tank Farm delivered for Little Bear H-64
Ba□e Oil Delivered today □ 0m3, Total at Tank Farm □ 22m3.
Invert Delivered today □ 0m3, Total at Tank Farm □0m3.

Sent o□t today □ 120.0m3, with Pro-North to FT.Nel□on, B.C.
Total Invert □ent o□t □180m3.

Daily invert lo□□e□: 0.0m3
Total invert lo□□e□: 31.0m3

Daily Contacts

Type	Contact Name	Title	Mo□ile
Office	Kim Richard□on	DR S□perintendent	403-542-1059
Office	Goly Zila□i	DR En□	403-462-8021
Office	Sandeep Randhawa	DR En□	403-519-5660
Office	Darren Brown	Con□tr□ction S□per	
Well Site S□pervi□or	Woody Periard	DR Field S□per	403-350-6027
Well Site S□pervi□or	Dan He□□dorfer	DR Field S□per	780-446-5160
Ri□ Mana□er	Troy Pre□□□	Ri□ Mana□er	

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
00:00	2.25	2.25	02:15	12	RUN CASING AND CEMENT				RUN FLOAT SHOE, 2 □TS CSG, FLOAT COLLAR, 116 □TS OF 177.8mm / 34.23k□/m / L-80 / LT□C / NEW □INDAL CASING, TOTAL LENGTH□1342.13m, SET □ 1341m, FLOAT □ 1317.75m.
02:15	2.00	4.25	04:15	5	COND MUD □ CIRC				CONDITION MUD □ CIRCULATE
04:15	0.25	4.50	04:30	21	SAFETY MEETING				SAFETY MEETING WITH SCHLUMBERGER PRIOR TO CEMENT □OB
04:30	2.50	7.00	07:00	12	RUN CASING AND CEMENT				CENMENT 177.8mm CASING W/ SCHLUMBERGER, PLUG DOWN □ 7:00HRS , 7m3 OF GOOD CEMENT RETURNS
07:00	0.25	7.25	07:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING W/ RIG CREW□RM□HUSKY REP
07:15	1.00	8.25	08:15	12	RUN CASING AND CEMENT				PRESS TEST CSG TO 21,000 KPA FOR 10 MINS, OKEY, CLEAN AND RIG OUT CEMENTERS
08:15	3.75	12.00	12:00	23	WAITING ON				W/O CEMENT
12:00	2.00	14.00	14:00	23	WAITING ON				W/O CEMENT, SET CASING SLIPS IN TENSION W/32,000 dan
14:00	0.25	14.25	14:15	25					CUT CASING , CLEAN UP RUFF CUT

Co□t O□ect N□m□er	Ori□ AFE S□p Am
US-51822-EX-02-DR-ID	11,529,266.00

Primary □o□Type
Initial Drillin□

Start Date	End Date
2/17/2012	3/10/2012

Final Stat□□	Sp□d Date
Drilled □ Ca□ed	2/19/2012 11:30

Daily Co□t Total	C□m Co□t To Date
3,071,916.20	9,043,847.94

Daily M□d Co□t	M□d Additive Co□t To Date
-76,344.21	54,791.29

Depth Start (mKB)	Depth End (mKB)
1,341.00	1,341.00

La□t Ca□in□Strin□
Prod□ction, 1,341.00mKB

Depth Pro□re□□(m)
0.00

Depth Start (TVD) (mKB)	Depth End (TVD) (mKB)
1,340.79	1,340.79

Tar□et Formation	E□t Total Depth (mKB)
Canol	1,412.00

Per□onnel Total Ho□r□(hr□)	C□m Per□Tot Hr (hr□)
600.00	11,872.00

Time Lo□Total Ho□r□(hr□)	Pro□lem Time Ho□r□(hr□)
24.00	

Pro□lem Time (□)	C□m Pro□lem Time (□)

Day□LTI (day□)	Day□RI (day□)

Personnel Log

Company	Co□nt	Tot Time (hr□)
Na□or□Drillin□ Limited	15	180.00
Mi Swaco	1	12.00
Sor□□Con□□ltin□ (1995) L	1	12.00
He□□dorfer Con□□ltin□ Ltd.	1	12.00
Mc□rath Re□o□rce Con□□ltin□Ltd.	1	6.00
Nor-Chief Con□□ltin□ Service□Ltd.	1	12.00
Hori□on North Camp□□ Cat	5	60.00
□NEW VENDOR□	2	24.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	2	24.00
H□e Inte□rated Ltd.	1	12.00
Frontier	1	12.00
Phoenix Technolo□y Service□LP	1	6.00
H□□ky	2	24.00
□NEW VENDOR□	1	12.00
Hallmark Technical Service	2	12.00
Stream-Flo Ind□□trie□ Ltd.	1	12.00
Weatherford Completion□Sy□tem□	1	12.00
□NEW VENDOR□	4	48.00
□NEW VENDOR□	6	72.00
□NEW VENDOR□	1	12.00

Safety Check Summary

Type	La□t Date	Next Date
Safety Meetin□	3/9/2012	3/10/2012

Rigs

Contractor	Ri□ N□m□er
Na□or□Drillin□	23

Ri□ S□pervi□or	Phone Mo□ile
Troy Pre□□□	

Ri□ Relea□e Date
3/10/2012 23:59

Mud Pumps

 # 1, GARDNER DENVER, PZ8

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	203.0

Liner Si□e (mm)	Vol/Stk OR (m□/□tk)
152.0	0.011

Pre□ (kPa)	Slow Spd	Stroke□(□p...	Eff (□)
		0	

 # 2, CONTINENTAL EMSCO, F800

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	229.0

Liner Si□e (mm)	Vol/Stk OR (m□/□tk)
152.0	0.013

Pre□ (kPa)	Slow Spd	Stroke□(□p...	Eff (□)
		0	

Report Printed: 6/4/2012

Well Name: HUSKY LITTLE BEAR H-64

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
14:15	0.75	15.00	15:00	14	NIPPLE UP B.O.P.				NIPPLE DOWN BOPS LAY OUT BOPS
15:00	0.25	15.25	15:15	7	RIG SERVICE				RIG SERVICE GREASE DRIVE TRAIN
15:15	3.75	19.00	19:00	14	NIPPLE UP B.O.P.				CLEAN UP RUFF CUT ON CASING AND PUT PART OF TREE ON
19:00	0.25	19.25	19:15	21	SAFETY MEETING				SAFETY MEETING CREW CHANGE MEETING W/ RIG CREW□RM□HUSKY REP
19:15	0.25	19.50	19:30	21	SAFETY MEETING				PRE-□OB SAFETY WITH WEATHER FORD PRIOR TO RUN BRIDGE PLUG
19:30	2.25	21.75	21:45	6	TRIPS				TRIPS WITH BRIDGE PLUG/FILL PIPE WITH WATER AND INHIBITOR
21:45	0.25	22.00	22:00	21	SAFETY MEETING				PRE-□OB SAFETY TOOL HAND AND CEMENTERS ON SETTING BRIDGE PLUG
22:00	0.25	22.25	22:15	25					OTHER CEMENTERS TO SET BRIDGE PLUG /SET BRIDGE PLUG SET AT 475M,18,500KPA
22:15	1.75	24.00	00:00	6	TRIPS				TRIPS LAY DOWN DRILL PIPE

Mud Checks

Type	Time	Depth (mKB)	Den□ity (k□/m□)	Vi□ (□/L)	Pla□tic Vi□c (cp)	Yield Point (Pa)
Gel 10 □ec (Pa)	Gel 10 min (Pa)	Gel 30 min (Pa)	Filtrate (mL/30min)	Filter Cake (mm)	pH	Solid□ (□)
MBT (k□/m□)	Percent Oil (□)	Percent Water (□)	Chloride□ (m□/L)	Calci□m (m□/L)	Pota□□i□m (m□/L)	Electric Sta□ (V)

Whole M□d Added (m□)	M□d Lo□t to Hole (m□)	M□d Lo□t to S□rface (m□)	Re□erve M□d Vol□me (m□)	Active M□d Vol□me (m□)

Drill Strings

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)

No□□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)
WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□
□ (□in□) (m□/min)	T (In□) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

Kick/Lost Circ

Occ□r Date	Occ□r Depth (mKB)	Control Date	Control Depth (mKB)	Incident Type

Comment

Casing Strings

Ca□in□ De□cription	R□n Date	Set Depth (mKB)
Prod□ction	3/9/2012	1,341.00

Comment

Ran : Float □hoe, 2-□oint□c□□, Float collar 116 □oint□ of 177.8mm / 34.23 k□/m / L-80 / LT□C / New □indal ca□in□, Total Len□th □ 1342.13m, Shoe □et □ 1341m/KB. Float □ 1317.75m. ID □ 161.7mm.

Casing Components

Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...
Ca□in□ □oint□		177.8	L-80	34.228	116	1,342.13	-1.13	
Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...
Float Collar		177.8	L-80	34.228	1	23.60	1,317.40	
Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...
Ca□in□ □oint□		177.8	L-80	34.228	2	23.25	1,317.75	
Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...
Float Shoe		177.8	L-80	34.228	1	0.44	1,340.56	

Mud Additive Amounts

De□cription	Co□t (/□nit)	Con□□med
INVERT	2,172.51	-37.0
FED ZAN D	105.76	1.0
OPTISEAL III	70.20	2.0
FED RHEOSMART	42.76	2.0
FEDERAL GEL	12.43	21.0
SAWDUST	4.12	39.0
FED WATE (BARITE)	15.57	211.0

Survey Data

MD (mKB)	Incl (°)	A□m (°)	TVD (mKB)

Last 5 Formations

Formation Name	Pro□ Top (TVD) (mKB)	Drill Top MD (mKB)

Hole Size (mm)

Max Nominal OD (mm)
177.8

Daily Drilling - Detail (legal size)

Report Start Date: 3/10/2012
Report #: 23, DFS: 20.52
Depth Progress: 0.00

Well Name: HUSKY LITTLE BEAR H-64

Licen□ed UWI	S□rface Le□al Location	Licen□e No.	State/Province
300H64650012600	300H64650012600	462	N.W.T

So□r Cla□□	ERP Re□□ired	Lahee Cla□□ification	B□□ine□□ Unit
Sweet	No	TH (C)	Canada Frontier - Exploration

Initial Gro□nd Elevation (m)	C□t/Fill (m)	Gro□nd Elv. (m)	KB Elevation (m)	KB to Gnd (m)
178.00	0.0	178.00	183.20	5.20

KB-Ca□in□ Flan□e Di□tance (m)	KB-T□□in□ Head Di□tance (m)	Total Depth All (TVD) (mKB)
5.47	5.00	Ori□inal Hole - 1340.8

Primary Well□ore Affected: Ori□inal Hole, 300H64650012600

Weather	Temperat□re (°C)	Road Condition	Hole Condition
Overca□t	-29	Fair	Good

Operation□at Report Time	Operation□Next Report Period
Wait on Dayli□ht.	Tear □load o□t ri□ □rental□etc.

Operation□□ 06:00
Wait on Dayli□ht to contin□e load o□t ri□.

Operation□S□mmary
In□tall wellhead top □ection, Held pre□o□ □afety meetin□ prior to pre□□te□t □rid□e pl□□ to 21,000 kpa hold for 10 min□, okey. Ri□ down ri□ floor □ □team clean. Tear o□t ri□ □ lower derrick for move, Held □afety meetin□ prior to tear o□t ri□ with tr□ck□, Ha□l heavy load□ to camp□ite □y □ed tr□ck□ to □e loaded for tran□port □o□th. Wait on dayli□ht to contin□e move. Held all □afety crew chan□e meetin□□ with □oth crew□, Ri□ Mana□er□ □ H□□ky Rep□.

Ri□ Relea□e Sat□rday March 10th/2012 □ 23:59 hr□.

Com□ination Lock for wellhead i□5182.

Remark□
o Accident□, Incident□or Enviromental Concern□.

Direction□to the location. From Norman Well□, Take the winter road □o□th for approx 34.4km. T□rn ri□ht and □o thro□□h the □ec□rity. Contin□e on the H□□ky Winter Rd to the H□□ky Camp Site. Contin□e on the H□□ky Winter Rd to km 44 T□rn left and contin□e to km 46. Keep left and □o to location at km 47. All road□are RADIO CONTROLLED.

Tank Farm delivered for Little Bear H-64
Ba□e Oil Delivered today □ 0m3, Total at Tank Farm □ 22m3.
Invert Delivered today □ 0m3, Total at Tank Farm □0m3.

Total Invert □ent o□t □180m3

Daily Contacts

Type	Contact Name	Title	Mo□ile
Office	Kim Richard□on	DR S□perintendent	403-542-1059
Office	Goly Zila□i	DR En□	403-462-8021
Office	Sandeep Randhawa	DR En□	403-519-5660
Office	Darren Brown	Con□tr□ction S□per	
Well Site S□pervi□or	Woody Periard	DR Field S□per	403-350-6027
Well Site S□pervi□or	Dan He□□dorfer	DR Field S□per	780-446-5160
Ri□ Mana□er	Troy Pre□□□	Ri□ Mana□er	

Time Log

Start Time	D□r (hr□)	C□m D□r (hr□)	End Time	Activity Code	Activity De□c.	Pro□/U...	Pro□lem Time (hr□)	Pro□lem Ref □	Comment
00:00	1.50	1.50	01:30	14	NIPPLE UP B.O.P.				PUT WELLHEAD CAP ON
01:30	0.25	1.75	01:45	21	SAFETY MEETING				PRE-□OB SAFETY WITH CEMENTERS ON PRESSURE TESTING CSG
01:45	0.25	2.00	02:00	15	TEST B.O.P.				PRESS TEST BRIDGE PLUG W/ CEMENT TRUCK TO 21,000 KPA F/ 10 MINS, OKAY.
02:00	5.00	7.00	07:00	22	TEAR DOWN				TEAR DOWN FLOOR STEAM AND CLEAN E□UIPMENT FOR TRANSPORT
07:00	0.25	7.25	07:15	21	SAFETY MEETING				SAFETY MEETING FOR SHIFT CHANGE HELD W/ BOTH CREWS, R.M. AND OPERATORS REP
07:15	0.25	7.50	07:30	21	SAFETY MEETING				SAFETY MEETING W/MULLEN TRCKING COMPANY
07:30	4.50	12.00	12:00	22	TEAR DOWN				RIG OUT RIG TOP MOVE BACK TO EDSON TO RACK / TRUCKS ON LOCATION□ 7:00/ MOVE RENTAL E□UIPMENT OFF LOCATION
12:00	1.00	13.00	13:00	22	TEAR DOWN				RIG OUT TO RACK IN EDSON
13:00	6.00	19.00	19:00	1	RIGUP □ TEARDOWN				MOVE RIG OFF LOCATION AND HAUL TO CAMPSITE LOCATION TO LOAD UP FOR MOVE BACK TO EDSON
19:00	0.25	19.25	19:15	21	SAFETY MEETING				SAFETY MEETING W/BOTH CREWS, R.M. AND OPERATORS REP
19:15	1.75	21.00	21:00	1	RIGUP □ TEARDOWN				MOVE MATS OFF OF HOLE CENTER □ STACK UP TO GET READY TO LOAD UP
21:00	3.00	24.00	00:00	25	Other				CLEAN UP AROUND LOCATION

Co□t O□ect N□m□er	Ori□ AFE S□p Am
US-51822-EX-02-DR-ID	11,529,266.00

Primary □o□ Type: Initial Drillin□

Start Date	End Date
2/17/2012	3/10/2012
Final Stat□□: Drilled □ Ca□ed	Spd Date: 2/19/2012 11:30
Daily Co□t Total: 515,592.00	C□m Co□t To Date: 9,559,439.94
Daily M□d Co□t	M□d Additive Co□t To Date: 54,791.29
Depth Start (mKB): 1,341.00	Depth End (mKB): 1,341.00

La□t Ca□in□ Strin□: Prod□ction, 1,341.00mKB

Depth Pro□re□□ (m): 0.00

Depth Start (TVD) (mKB)	Depth End (TVD) (mKB)
1,340.79	1,340.79
Tar□et Formation: Canol	E□t Total Depth (mKB): 1,412.00
Per□onnel Total Ho□r□ (hr□): 704.00	C□m Per□Tot Hr (hr□): 12,576.00
Time Lo□Total Ho□r□ (hr□): 24.00	Pro□lem Time Ho□r□ (hr□)
Pro□lem Time (□)	C□m Pro□lem Time (□)
Day□LTI (day□)	Day□RI (day□)

Personnel Log

Company	Co□nt	Tot Time (hr□)
Na□or□Drillin□ Limited	15	180.00
Sor□□Con□□ltin□ (1995) L	1	12.00
He□□dorfer Con□□ltin□ Ltd.	1	12.00
Nor-Chief Con□□ltin□ Service□Ltd.	1	12.00
Hori□on North Camp□□ Cat	5	60.00
□NEW VENDOR□	2	24.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	1	12.00
□NEW VENDOR□	2	24.00
H□e Inte□rated Ltd.	1	12.00
Frontier	1	12.00
H□□ky	2	24.00
□NEW VENDOR□	1	12.00
Stream-Flo Ind□□trie□ Ltd.	1	12.00
Weatherford Completion□Sy□tem□	1	12.00
□NEW VENDOR□	4	24.00
□NEW VENDOR□	3	36.00
□NEW VENDOR□	1	12.00
M□llen Tr□ckin□ Inc.	20	200.00

Safety Check Summary

Type	La□t Date	Next Date
Safety Meetin□	3/10/2012	3/12/2012

Rigs

Contractor	Ri□ N□m□er
Na□or□Drillin□	23
Ri□ S□pervi□or: Troy Pre□□□	Phone Mo□ile

Ri□ Relea□e Date: 3/10/2012 23:59

Mud Pumps

 # 1, GARDNER DENVER, PZ8

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	203.0
Liner Si□e (mm): 152.0	Vol/Stk OR (m□/□tk): 0.011	
Pre□ (kPa)	Slow Spd	Stroke□ (□p... : 0	Eff (□)

 # 2, CONTINENTAL EMSCO, F800

Pwr (kW)	Rod Dia (mm)	Stroke (mm)
	0.0	229.0
Liner Si□e (mm): 152.0	Vol/Stk OR (m□/□tk): 0.013	
Pre□ (kPa)	Slow Spd	Stroke□ (□p... : 0	Eff (□)

Mud Additive Amounts

De□cription	Co□t (/□nit)	Con□□med

Survey Data

MD (mKB)	Incl (°)	A□m (°)	TVD (mKB)
1,341.00	0.40	129.70	1,340.79

Report Printed: 6/4/2012

Well Name: HUSKY LITTLE BEAR H-64

Mud Checks

Type	Time	Depth (mKB)	Den□ity (k□/m□)	Vi□ (□/L)	Pla□tic Vi□c (cp)	Yield Point (Pa)

Gel 10 □ec (Pa)	Gel 10 min (Pa)	Gel 30 min (Pa)	Filtrate (mL/30min)	Filter Cake (mm)	pH	Solid□ (□)

MBT (k□/m□)	Percent Oil (□)	Percent Water (□)	Chloride□ (m□/L)	Calci□m (m□/L)	Pota□□i□m (m□/L)	Electric Sta□ (V)

Whole M□d Added (m□)	M□d Lo□t to Hole (m□)	M□d Lo□t to S□rface (m□)	Re□erve M□d Vol□me (m□)	Active M□d Vol□me (m□)

Drill Strings

Bit R...	Drill Bit	Make	IADC Bit D□ll	TFA (incl No□) (mm□)

No□□le□ (mm)	Strin□ Len□th (m)	Strin□ Wt (daN)	BHA ROP (m...

Drill String Components

Item De□cription	□t□	OD (mm)	ID (mm)	Len (m)	Top Thread

Drilling Parameters

Well□ore	Start (mKB)	Depth End (mKB)	C□m Depth (m)	Drillin□ Time (hr□)	C□m Drill Time (...	Int ROP (m/hr)	□ (flow) (m□/min)

WOB (daN)	RPM (rpm)	SPP (kPa)	Drill Str Wt (daN)	PU Str Wt (daN)	SO Str Wt (daN)	Drillin□ Tor□□e	Off Btm T□

□ (□in□) (m□/min)	T (In□) (°C)	P (BH Ann) (kPa)	T (□h) (°C)	P(S□rf Ann) (kPa)	T (□□rf ann) (°C)	□ (li□rtrn) (m□/...	□ (□ret□rn) (m□/...

Kick/Lost Circ

Occ□r Date	Occ□r Depth (mKB)	Control Date	Control Depth (mKB)	Incident Type

Comment

Casing Strings

Ca□in□ De□cription	R□n Date	Set Depth (mKB)

Comment

Casing Components

Item De□cription	Make	OD (mm)	Grade	Wt (k□/m)	□oint□	C□m Len (m)	Top (mKB)	TopConn T...

Last 5 Formations

Formation Name	Pro□ Top (TVD) (mKB)	Drill Top MD (mKB)

Hole Size (mm)

Max Nominal OD (mm)
177.8

E.10 DAILY DRILLING FLUID REPORTS

MI SWACO
A Schlumberger Company

DRILLING FLUIDS DAILY SUMMARY

													WBM Properties									
Date	*Depth (MD)*	*Depth (TVD)*	*Density*	*Funnel Vis*	*PV*	*YP*	*Gels*			*Fluid Loss*	*Fluid Loss*	*Solids*	*Water*	*Oil*	*Sand*	*MBT*	*pH*	*Alkalinities*			*Cl-*	*Ca++*
	m	**m**	**kg/m³**	**s/L**	**mPa·s**	**Pa**	**10 sec**	**10 min**	**30 min**	**API**	**HTHP**	**%**	**%**	**%**	**%**	**kg/m³**		**Pm**	**Pf**	**Mf**	**mg/l**	**mg/l**
17-Feb-2012																						
18-Feb-2012																						
19-Feb-2012			1010	43	7	3.5	4.5	9	9	15	na	na	na	na		6	9		0.15	0.05	100	60
20-Feb-2012	218	218	1140	43	8	3	4	7	7	15			100		trace	21	8.5		0.15	0.06	160	60
21-Feb-2012	503	503	1190	45	18	8	4.5	8.5	8.5	8.5	n/a	n/a	n/a	n/a	Trace	28.5	8.5		0.16	0.07	160	100
22-Feb-2012	510	510	1110	51	23	8.5	4	7	7	6	n/a	n/a	n/a	n/a	Trace	28.5	8.5		0.16	0.07	160	100

MI SWACO
A Schlumberger Company

													OBM Properties								
Date	*Depth (MD)*	*Depth (TVD)*	*Density*	*Funnel Vis*	*PV*	*YP*	*Gels*			*Fluid Loss*	*Fluid Loss*	*Solids*	*Correct solids*	*Oil*	*Uncorrect Water*	*O / W Ratio*		*Cl Whole Mud*	*Salt*	*Lime*	*E Stability*
	m	**m**	**kg/m³**	**s/L**	**mPa·s**	**Pa**	**10 sec**	**10 min**	**30 min**	**API**	**HTHP**	**%**	**%Vol**	**%Vol**	**%Vol**	**Oil**	**Water**	**mg/l**	**wt %**	**kg/m³**	**volts**
24-Feb-2012	510	510	1200	49	15	3	2.5	5	5	n/a	4	14	12.23	70	16	81	19	43,000	29.61	22.57	1012
25-Feb-2012	713	713	1200	48	16	3	3	5.5	5.5	n/a	3	14.5	12.68	69.5	16	81	19	44,000	30.09	21.09	929
26-Feb-2012	1090	1090	1205	49	17	3.5	3.5	6.5	6.5	n/a	3	14.5	12.69	69	16.5	81	19	44,000	29.44	19.61	916
27-Feb-2012	1170	1170	1205	48	18	3.5	3.5	8	8	n/a	3	15	13.23	69	16	81	19	43,000	29.61	19.24	927
28-Feb-2012	1202	1202	1280	48	18	3.5	3	7.5	7.5	n/a	3	17	15.28	67	16	81	19	42,000	29.12	17.76	891
29-Feb-2012	1222	1222	1290	50	19	4	4	8.5	8.5	n/a	3	17.5	15.78	66.5	16	81	19	42,000	29.12	17.02	816
1-Mar-2012	1234	1234	1260	47	19	3.5	3.5	8	8	n/a		15.5	13.68	68.5	16	81	19	44,000	30.09	17.39	792
2-Mar-2012	1261	1261	1250	n/a	13	3.5	3	7.5	7.5	n/a		16	14.16	69	15	82	18	44,000	31.46	17.02	732
3-Mar-2012	1261	1261	1250	n/a	13	3.5	3	7.5	7.5	n/a	3	16	14.16	69	15	82	18	44,000	31.46	17.02	897
4-Mar-2012	1264	1264	1230	46	13	3.5	3	7	7	n/a	3	15	13.11	70	15	82	18	45,000	31.95	17.76	1113
5-Mar-2012	1302	1302	1225	48	13	4	3.5	7.5	7.5	n/a	3	15	13.11	70	15	82	18	45,000	31.95	17.02	1092
6-Mar-2012	1341	1341	1240	46	14	3.5	3.5	7.5	7.5	n/a	3	16	14.16	69	15	82	18	44,000	31.46	17.76	1097
7-Mar-2012	1341	1341	1240	46	14	3.5	3.5	7.5	7.5	n/a	3	16	14.16	69	15	82	18	44,000	31.46	17.76	1097
8-Mar-2012	1341	1341	1260	56	14	4	3.5	8.5	8.5	n/a	3	17	15.23	67	16	81	19	43,000	29.61	15.91	917
9-Mar-2012	1341	1341	1260	57	14	4	3.5	8.5	8.5	n/a	3	17	15.23	67	16	81	19	43,000	29.61	15.91	917

Input Data

Mar 5, 2012

Mud Weight	1225	kg/m³
% Base Fluid From Retort	70	%
Drilling Solids SG	2.6	
Base Fluid SG	0.76	
Retort Cell Weight	316	gm
Cell + Wet Cutting Weight	369	gm
Cell + Dry Cutting Weight	361	gm
Graduated Cylinder Weight	71	gm
Water Volume in Cylinder	3	gm
Cylinder + Water + Base Fluid Weight	78	gm

Results

Mass of Wet Cuttings	53.00	gm
Mass of Dry Cuttings	45.00	gm
Mass of Base Fluid	4.00	gm
Mass Balance Factor	0.981	-
Mass of Base Fluid / kg Wet Cuttings	75.47	gm/kg
Mass of Base Fluid / kg Dry Cuttings	88.89	gm/kg
Cuttings Retention Factor	0.447	m³ Mud / m³ Cutting

E.11 WELL TERMINATION REPORT

National Energy Board | Office national de l'énergie

WELL TERMINATION RECORD

Well Name	Husky Little Bear H-64	Well ID	2077
Operator	Husky Oil Operations Ltd	Current Well Status	Suspended
Total Depth	1341m KB	Licence No.	Exploration Licence 462
Location Unit	H	Section 64	Grid
Coordinates (NAD27)	*Surface*	Lat 64 ° 53 ' 28.5 "	Long 126 ° 11 ' 20.3 "
	Bottom Hole	Lat 64 ° 53 ' 28.5 "	Long 126 ° 11 ' 19.8 "
Region	NWT Mainland		
Target Formation	Canol / Hume	Field/Pool	Slater River /
Elevation KB/RT	183.2 m	Ground Level / Seafloor	178.5 m
Spud/Re-Entry Date	19 Feb 2012	Rig Release Date	10 Mar 2012

CASING AND CEMENTING PROGRAM

O.D. (mm)	Weight (kg/m)	Grade	Setting Depth (m KB)	Cementing (m^3)
508	Conductor pipe	ASTM A 53	23	15
244.5	53.6	J-55	510	40
177.8	34.2	L-80	1341	30

PLUGGING PROGRAM

Type of Plug	Interval (m KB)	Felt	Depth (m KB)	Cement (m^3)
Other	1340.5-1341	Yes	1340.5	Float Shoe
Cement	1318-1340.5	No	1318	23
Other	1317.5-1318	Yes	1317.5	Float Collar
Bridge	475-476	Yes	475	Bridge plug
Select	-	Select		

PERFORATION

Interval (m KB)	Comments
-	Cased and cemented. No perforation was done on this well
-	
-	
-	

Lost Circulation/Overpressure Zones: No Loss / No Gain & Flow.
Equipment Left on Seafloor (Describe): N/A
Provision for Re-entry (Describe and attach sketch):
Other Downhole Completion/Suspension: Retrievable Bridge plug at 475m, wellhead and valves are installed-see attached

"I certify that the information provided on this form is true and correct"

Name	*Kim Richardsoni*	Telephone	(403) 298-7273 Ext
Job Designation	Drilling Superintenden	E-Mail	kim.richardson@huskyenergy.com
Operator	Husky Oil Operations Ltd		

Signature: Kim Richardson Date:
Responsible Officer of Company

NATIONAL ENERGY BOARD USE ONLY

The details of this document have been examined and verified by

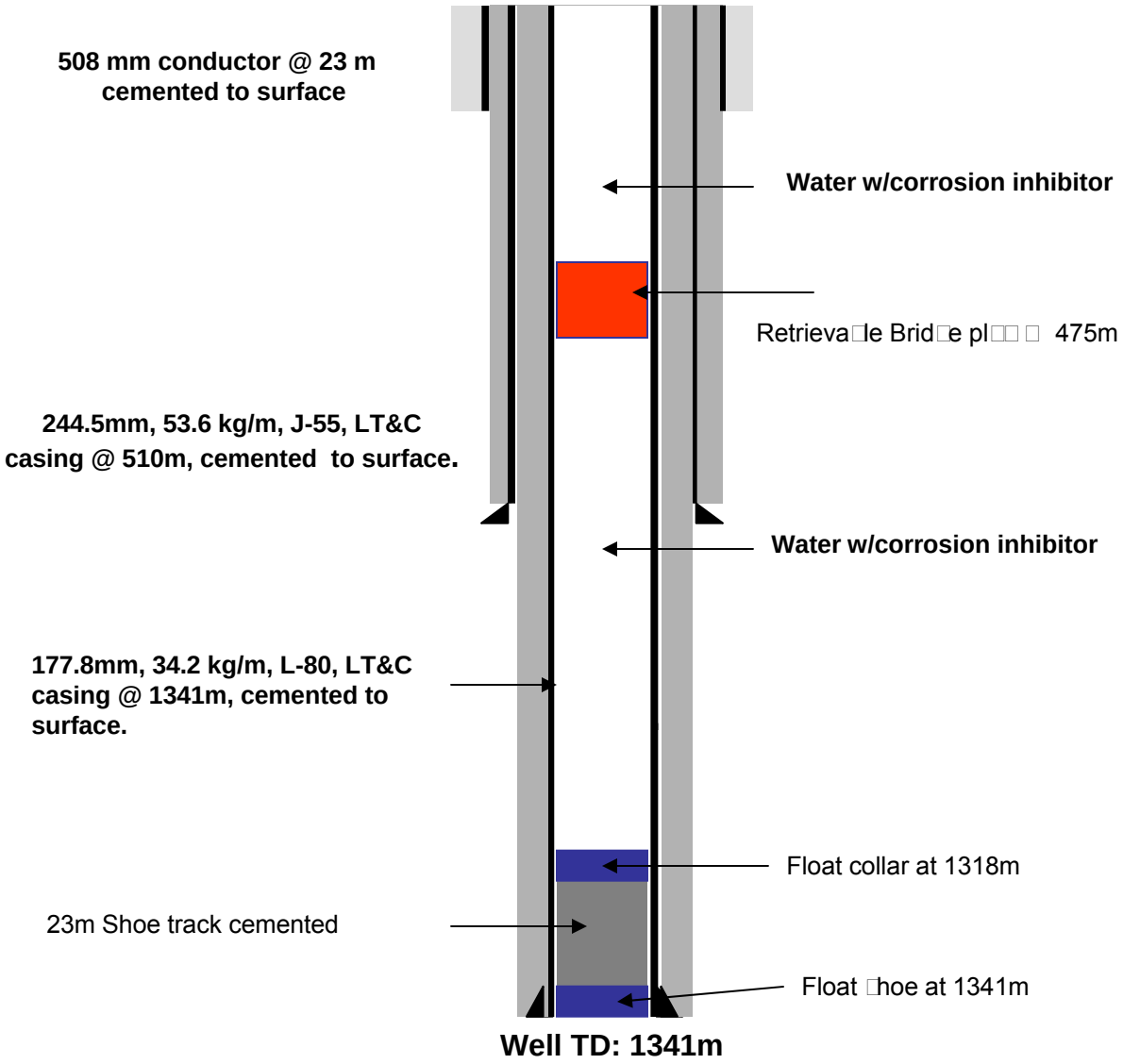
Job Designation: Well Identifier: Unique Well Identifier:

Signature: Date:
NEB Authority

Canada

Husky Little Bear H-64 (suspended status)

Depths in MD RKB (not to scale)



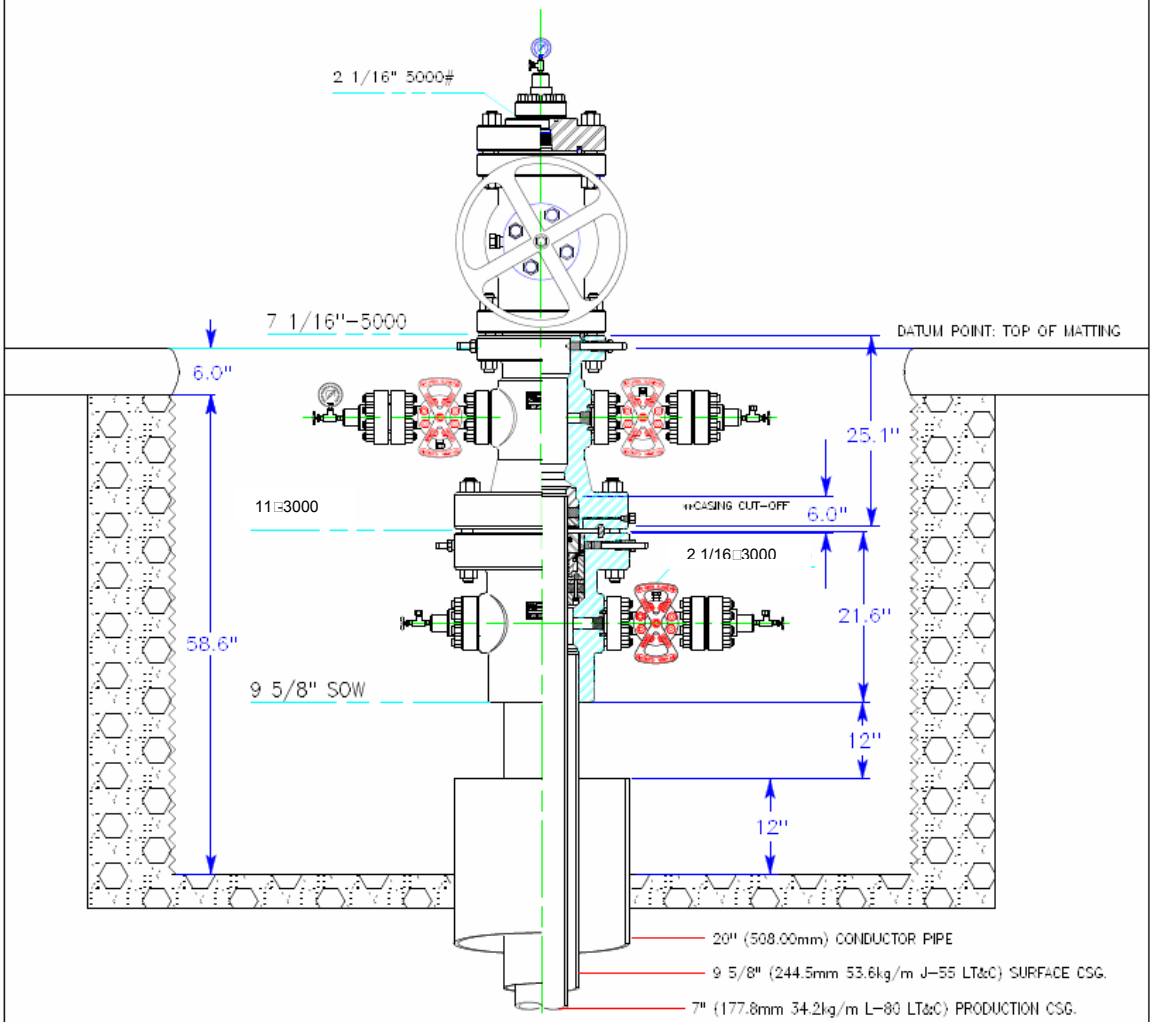
Well TD: 1341m

▪Primary Barrier

- **177.8mm casing cemented to surface and not perforated.**
- **177.8mm casing pressure tested to 21,000Kpa at the plug bump.**
- **23m cemented shoe track consists of float shoe and float collar.**
- **Cement was displaced with water, after bumping the plug, increased the pressure and tested the casing to 21000 KPa. Released the pressure, no back flow. Note: this is inflow test of shoe track against differential pressure of cement slurry (annulus) and water (inside the casing).**

▪Secondary Barrier

- **Retrievable Bridge plug set at 475m.**
- **Tubing head spool and suspension valve tested against Bridge plug to 21000 KPa**



Note: Dimensions +/- 0.5" due to forging
Drawing is not to scale, and only used as representation

HUSKY et al LITTLE BEAR N-9 AND H-64 NABORS 23	DWN.		11/02/11	EDMONTON, AB. CANADA	DRAWING No. C2041 PAGE 8 of 10 REV 2
	CHK.				
	APPR.				
		BY:	DATE