

March 1, 2024

Office of the Regulator of Oil & Gas Operations
Government of the Northwest Territories
PO Box 132
Yellowknife NT X1A 2L9

Attention: Ms. Pauline de Jong
Executive Director

**Cover Letter for Cut/Cap Operation as part of the Well Abandonment
MGM EAST MACKAY I-78, ACW-2022-MGM-I-78-WID2078**

Please find attached for submission the required documents for Well Termination (Abandonment) of the 300/I-78/6450-12530/0 well, Licence # 2078

Attachments include:

1. Change of Well Status
2. Well Termination Record
3. Summary of Cut/Cap Well Operations
4. Cut/Cap Daily Reports
5. Picture of capped wellbore
6. Downhole Schematic

Non-Saline Water was placed in the wellbore as part of the suspension and and the abandonment operation was completed safely.

Sincerely,



John Hawkins, P. Eng.
Director Asset Management
MGM Energy
403-817-5074

CHANGE OF WELL STATUS

This form must be filed with the Office of the Regulator of Oil and Gas Operations within 30 days of a change in well status.

INSTRUCTIONS:

Send one electronic copy of this form by email to orogo@gov.nt.ca. If you wish to communicate with OROGO in hard copy, please do so using the courier address found at www.orogo.gov.nt.ca.

WELL INFORMATION

Well Name	//MGM EAST MacKay I-78	Operator	MGM Energy
Well Identifier (WID)	2078	Unique Well Identifier (30xx...)	300/I-78/6450-12530/00

STATUS INFORMATION

Effective Date: February 23, 2024

Well Type:	Other
If other, specify:	Suspended, no production
Well Mode:	Abandoned
If other, specify:	
Other:	
If other, specify:	

Fluid Production:		(choose all applicable)
Not applicable	<input type="checkbox"/>	Steam <input type="checkbox"/>
Crude Oil	<input type="checkbox"/>	Air <input type="checkbox"/>
Gas	<input checked="" type="checkbox"/>	Carbon Dioxide <input type="checkbox"/>
Water	<input type="checkbox"/>	Nitrogen <input type="checkbox"/>
Brine	<input type="checkbox"/>	Liquefied Petroleum Gas <input type="checkbox"/>
Acid Gas	<input type="checkbox"/>	Bitumen <input type="checkbox"/>
Solvent	<input type="checkbox"/>	Other <input type="checkbox"/>

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

Name	John Hawkins	Phone	(403) 817 Ext 5074
Title	Director Asset Management	E-Mail	john.hawkins@paramountres.com
Operator	MGM Energy		
Signature		Date	2024-03-01

Responsible Officer of Company

WELL TERMINATION RECORD

INSTRUCTIONS:

1. Complete both pages.
2. Send one electronic copy of this form and supporting technical documentation by email to orogo@gov.nt.ca. If you wish to communicate with OROGO in hard copy, please do so using the courier address found at www.orogo.gov.nt.ca.

WELL INFORMATION

Well Name	MGM EAST MACKAY I-78	Operator	Paramount Resources Ltd.
Well Type	Select (if Other, specify _____)	Contractor	Precision Well Service
Well Identifier	N2078	Current Well Status	Abandoned

RELATED LICENCES AND AUTHORIZATIONS

Operating Licence No.	<u>NWT-OL-2014-014</u>	Operations Authorization	OA - 2019-002- MGM
PRA Licence No.	<u>NWT-OL-2014-014</u>	Exploration Licence Approval to Alter Condition of Well	ACW - 2022- MGM-I-78- WID2078

LOCATION INFORMATION

Coordinates Datum: NAD83 (if Other, please specify _____)

Surface	Lat	64 ° 79 ' 51 "	Long	125 ° 72 ' 37 "
Bottom Hole	Lat	° ' "	Long	° ' "

Region: Sahtu Unit Section Grid 64-50 125-30

ACTIVITY INFORMATION

Target Formation(s)	BLUEFISH	Field/Pool(s)	LIARD /
Elevation KB/RT	160.7 m	Ground Level / Seafloor	155.1 m
Service Rig MIRU Date	February 2, 2024	Total Depth	2001.0 m KB
Service Rig Release Date	February 17, 2024	Total Vertical Depth	2001.0 m KB

CASING AND CEMENTING PROGRAM

O.D. (mm)	Weight (kg/m)	Grade	Setting Depth (m KB)	Cementing (m ³)
244	59.5	L80	402	8
178	38.7	L80	1988	8

PLUGGING PROGRAM				
Type of Plug	Interval (m KB)	Felt	Setting Depth (m KB)	Cementing (m ³)
Cement Retainer	1810.0-1810.3	Yes	1810.0	
Cement	1810.3-1883.7	No		5.9
Cement	1717.0-1810.0	Yes		93 meters
Select	-	Select		

PERFORATION	
Interval (m KB)	Comments
1946.0-1948.0	Bluefish
1869.0-1884.0	Lower Canol
1840.0-1842.0	Upper Canol
-	

OTHER	
Lost Circulation/Overpressure Zones	No
Equipment Left on Site (Describe)	Tombstone
Provision for Re-entry (Describe and attach sketch)	No
Other Downhole Completion/Suspension	Well was shut in with tbg plug and BPV Feb 2013
Additional Comments	

<i>"I certify that the information provided on this form is true and correct"</i>			
Name	John Hawkins	Phone	(403) 817 - 5074
Title	Director Asset Management	E-Mail	john.hawkins@paramountres.com
Operator	MGM Energy		
Signature		Date	2024-03-01
Responsible Officer of Company			



ARO Daily Op Summary

Paramount
resources *ltd.*

Well Name: MGM EAST MACKAY I-78

Well Header

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	License # N2078	State/Province NorthWest Territories	Well Configuration Type Vertical
Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	KB-Ground Distance (m) 5.60	KB-Casing Flange Distance (m) 4.80	Spud Date 1/27/2013	Rig Release Date 2/25/2013

Daily Operations

Start Date	Summary
1/31/2024	<p>HSE Summary: No incidents, accidents or spills. Contractor appear fit for duty.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> - Meet and review operations with Cameron, Reliance Wireline, McClelland Rentals, Precision Well Servicing, Cascade Trucking and Weatherford completions. Review job scope and operations with contractors. - WSS load up rental material form McClelland Rentals in personal truck. - End report for day
2/1/2024	<p>HSE Summary: No incidents, accidents or spills. Contractor appear fit for duty.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> - Start day travel management notification with Calgary. - Travel from Grande Prairie to Ft Simpson. - End day travel management notification with Calgary. - End report for day.
2/2/2024	<p>HSE Summary: No incidents, accidents or spills. Contractor appear fit for duty.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> - Start day travel management notification with Calgary. - Travel from Ft Simpson to camp. - End day travel management notification with Calgary. - Discuss rentals and road access with construction supervisor. - End report for day.
2/3/2024	<p>HSE Summary: No incidents, accidents or spills. Contractor appear fit for duty.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> - Spot rig matting for tank farm. Setup (2) 63 m³ insulated tanks. Setup field office, meeting room and bathroom. Spot and rig in light towers. Confirm PWS Rig 412 doing repairs in Norman Wells in preparation for 5-Jan-2024 job start. - End of report for day.
2/4/2024	<p>HSE Summary: No incidents, accidents or spills. Contractor appear fit for duty.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> - Cameron wellhead crew took Hwy 97 between Ft Nelson and Ft Laird. Should of taken Hwy 77. Crew back trac to Ft Nelson to spend night. Resume travel operations to site on 5-February. - Reliance Wire Line crew, Cascade Hot Oiler, Dash Tong crew and Weatherford tool hand travel to Ft Simpson. - Precision Rig 891 complete shop repairs and prepare rig and support equipment to travel from Norman Wells to site on 5-February. - End of report for day.
2/5/2024	<p>HSE Summary: No incidents, accidents or spills. Environmental monitor patrol lease and roads. Contractor appear fit for duty.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> - Reliance Wire Line crew, Cameron Wellhead crew, Cascade Hot Oiler, Dash Tong crew and Weatherford tool hand travel from Ft Simpson. - Load and travel PWS # 891 from Norman Wells to site. - Haul in 26.5 m³ non-saline fresh water to site. Heat water to 20 °C. Clear snow from around well centre with loader. Fill in well centre with lease dirt. - PWS Rig # 891 travel to rig camp at KM # 16. Motor issue with rig. HRN mechanic travel from Norman Wells. Determine (2) push rods are bent. Mechanic looking for replacement part. - Spot PWS support equipment on site as per MGM Energy, contractor, industry and government rules and regulations. - Perform 30 minute Surface Casing Vent Flow Bubble Test. No bubbles observed. - Rig in support equipment. Perform on going CAODC rig inspection of equipment as rigged in. Run 80 HP boiler lines to wellhead. Cover and heat wellhead and 34.5 MPa x 179.4 mm BOP for night. - Boiler hand maintain heat on wellhead, tank farm and equipment for night. - End report for day.



ARO Daily Op Summary

Well Name: MGM EAST MACKAY I-78

Well Header

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	License # N2078	State/Province NorthWest Territories	Well Configuration Type Vertical
Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	KB-Ground Distance (m) 5.60	KB-Casing Flange Distance (m) 4.80	Spud Date 1/27/2013	Rig Release Date 2/25/2013

Daily Operations

Start Date	Summary
2/6/2024	<p>HSE Summary: No incidents, accidents or spills. Environmental monitor patrol lease and roads. Contractor appear fit for duty.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> - HRN mechanic and PWS field supervisor continue to repair PWS #412 motor. - Run hydraulic lines from accumulator to Class III BOP. Stump function test Class III - 34.5 MPa BOP. Test pipe rams and blind rams 1.4 MPa (low) and 30 MPa (high). Working with in specifications. 25.7 turn to lock rams closed. - Rig in Cameron 103 mm x 69 MPa adapter flange and BPV lubricator. Lubricate out Cameron BPV. No pressure below BPV. Rig down lubricator. - Off load and start rig in rig pump, tank and (2) lines to wellhead. Off load catwalk, pipe racks and garbage bin. - Pressure test 114 mm tubing with 0.20 m³ - 35°C fresh water to 21.0 MPa. Held 10 min - Rig in wireline and picker. Install adapter flange and wire line 34.5 MPa BOP. Inspect pack off head. Tie 0.125" (3.17 mm) SS Line rope socket. Purge lubricator prior and after each use with N2. - Run 93 mm Gauge Ring. Tag tubing plug 1813 mKB. Pull Gauge Ring. - Run JS Pull Tool. Latch and unseat Otis Prong. No signs pressure at surface. Pull tool string and Otis Prong. No signs over pull. - Run SB Pull Tool. Latch and unseat Otis Plug Body. Pull Tool String and Otis Plug Body. No signs over pull. - Lay down lubricator. Rig out and release picker. - Spot and rig up PWS # 412 rig and derrick. Centre and secure rig. Rig in work floor. - Winterize clean and secure wellhead. - Boiler hand maintain heat on wellhead, tank farm and equipment for night. - End report for day.
2/7/2024	<p>HSE Summary: No incidents, accidents or spills. Environmental monitor patrol lease and roads. Contractor appear fit for duty.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> - Rig in wireline unit. Install Adapter flange and wire line 34.5 MPa BOP. Inspect pack off head. Tie 0.125" (3.17 mm) SS Line rope socket. Purge lubricator prior and after each use with N2. SITP 0 KPa. SICP 0 KPa - Run GS Pull Tool. Latch and pull Dual Steller 10K - 7 pin Bottom Hole recorders at 08:25 hrs. Rig down lubricator. Unable to download information on site. Will download at later date and send to Calgary. - Tie in pressure line to tubing. Pump 917 fresh (non-saline) water to fill tubing. Injection test: 110L/min x 17.5 MPa in 1 min, 107 L/min x 18 MPa in 1 min, 102 L/min x 18.5 MPa in 1 min, 68 L/min x 19 MPa in 1 min and 12 L/min x 19 MPa in 1 min. ISIP 15 MPa. After 3 minutes pressure 14 MPa. - Run tool string with 56.7 mm Gauge Ring to 1943.5 mKB. Tag obstruction. Pull tool string. Run tool string with 75 mm GS Pull Tool to 1943.5 mKB. Tag obstruction. Pull tool string. Recover no obstruction. Rig down slickline. - Fill tubing 0.50 m³ fresh (non-saline) water to fill tubing. Pressure up tubing string to 31 MPa. No feed rate achieved. Held pressure 10 minutes. Pressure drop to 19 MPa. Bleed off pressure. - Rig in eline BOP. Run RTG 43 mm x 1.2 m x 8 SPM x 3.5 gram perforating gun. Correlate on depth to downhole diagram dated 3/1/2013. Perforate 114.3 mm x 20.09 tubing string interval 1805.0 - 1806.2 mKB at 14:47 hrs. Pull fired perf gun. Rig down wireline. - Reverse circulate 40 m³ non-saline fresh water down casing and up tubing at 400 L/min x 15 MPa. Return 37 m³ emulsion then 2.0 m³ non-saline fresh water. Final returns are non-saline fresh water. - Rig down and winterize circulation lines and tanks. Rig out stairs and working floor. Winterize clean and secure wellhead. Release rig crew. - Boiler hand maintain heat on wellhead, tank farm and equipment for night. - End report for day.



ARO Daily Op Summary

Well Name: MGM EAST MACKAY I-78

Well Header

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	License # N2078	State/Province NorthWest Territories	Well Configuration Type Vertical
Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	KB-Ground Distance (m) 5.60	KB-Casing Flange Distance (m) 4.80	Spud Date 1/27/2013	Rig Release Date 2/25/2013

Daily Operations

Start Date	Summary
2/8/2024	<p>HSE Summary: No incidents, accidents or spills. Environmental monitor patrol lease and roads. Contractor appear fit for duty.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> - Remove wireline 103 mm BOP and Flow tee. Remove 103 mm x 69 MPa Upper Dual Master Valve wellhead with 279.4 mm - 34.5 MPa x 103 mm - 69 MPa Adapter Flange. - Makeup Cameron Tubing Hanger Pull tool with 114 .3 mm x 1.8 MPa Pup Joint onto tubing hanger. Pickup 114.3 mm tubing string. Movement at 17,000 daN. Pickup to 37000 daN. Unable to locate free point in Weatherford "LDS" Latch Assembly. Land tubing hanger. - Install 279.4 mm x 179.4 mm x 34.5 MPa Adapter Flange and Class III - 34.5 MPa BOP. Rig in work floor and tarp in wellhead. - Pressure test 34.5 MPa BOP wellhead connection and pipe rams to 1.4 MPa (low) and 30 MPa (high). Held each 10 minutes. Pressure test annular bag 1.4 MPa (low) and 10 MPa (high). held each 10 minutes. - Pickup on 114 mm tubing string. Try working pipe up and down to try and free up Weatherford "LSA" Latch Seal. Try right rotation to release from liner. Torque up tubing string to 3500 ft lbs (max). Unable to release from Weatherford 177.8 mm x 114 mm "UltraPak HU" Upper Bore Hydraulic Set Double Grip Liner Top Packer - Rig in wireline flow tee and pressure control equipment on to 114 mm - 34.5 MPa Stab Valve. Makeup and run 92.2 mm Jet Cutter (part # CUT-3625-062NT). Correlate on depth to downhole diagram dated 3/1/2013. Tubing string weight 35,000 daN. Cut 114.3 mm x 20.09 kg/m P-110 tubing at 1812.0 mKB x 16:00 hrs. Pull out tool string and fired jet cutter. Rig down wireline flo tee, pressure control equipment and wire line unit. - Pull and lay down 20 = Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m. Position tubing bottom 1572 mKB for night. - Winterize, lines, pump and wellhead. SDFN rig crew. - Boiler hand maintain heat on wellhead, tank farm and equipment for night. - End report for day.
2/9/2024	<p>HSE Summary: No incidents, accidents or spills. Environmental monitor patrol lease and roads. Contractor appear fit for duty.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> - Pull and lay down (129) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m and (1) Cut Joint Tubing 114.3 mm x 10.85 m LT&C P-110 20.09 kg/m. Rig down 114.3 mm tubing handling equipment. - Rig in 60.3 mm tubing handling equipment. Run (15) Joints Tubing 60.3 mm x 140.38 m J-55 6.99 kg/m. Rig down 60.3 mm tubing handling equipment. - Rig in 73 mm tubing handling equipment. Run (4) Joints Tubing 73 mm x 36.88 m J-55 9.67 kg/m with Slim Hole Couplers. Rig down 73 mm tubing handling equipment. - Rig in 114.3 mm LT&C Tubing handling equipment. Run (15) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m. Position tubing bottom 357 mKB for night. - Winterize, lines, pump and wellhead. SDFN rig crew. - Boiler hand maintain heat on wellhead, tank farm and equipment for night. - End report for day.
2/10/2024	<p>HSE Summary: No incidents, accidents or spills. Environmental monitor patrol lease and roads. Contractor appear fit for duty.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> - Run (121) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m. - Tag top of Jet Cut 114.3 LT&C P-110 20.09 kg/m tubing at 1812.0 mKB. Try rotation and working tapered 114 mm x 73 mm x 60.3 mm tubing string into Jet Cut 114 mm Tubing. Weight on cut lip range from 500 daN to 5000 daN. Still unable to work into Jet Cut 114.3 mm Tubing. - Rig in circulation lines. Pump 6.4 m³ fresh (non-saline) water to break forward circulation at 5 MPa x 700 L/minute. Work taper tubing string up and down while pumping but unable to get into Jet Cut 114 mm Tubing 1812 mKB. - Tubing bottom 1812 mKB. Close returns from annulus. Pressure up tubing and casing to 12.0 MPa. Establish feed rate 75 L/minute for 10 minutes x 750 liters fresh (non saline) water. Try to slide tubing string into 114.3 mm Jet Cut Tubing 1812 mKB while injecting at 12.0 MPa x 75 L/min. Unable to slide into Jet Cut 114.3 mm Tubing. - Stop pump and monitor pressure. 1 minute SICP 8900 KPa. 2 minute SICP 6800 KPa. 3 minute SICP 5075 KPa. 4 minute SICP 3920 KPa. 5 minute SICP 2975 KPa. - Pull and lay down (5) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m. Position tubing bottom 1758 mKB for night. - Winterize, lines, pump and wellhead. SDFN rig crew. - Boiler hand maintain heat on wellhead, tank farm and equipment for night. - End report for day.



ARO Daily Op Summary

Well Name: MGM EAST MACKAY I-78

Well Header

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	License # N2078	State/Province NorthWest Territories	Well Configuration Type Vertical
Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	KB-Ground Distance (m) 5.60	KB-Casing Flange Distance (m) 4.80	Spud Date 1/27/2013	Rig Release Date 2/25/2013

Daily Operations

Start Date	Summary
2/11/2024	<p>HSE Summary: No incidents, accidents or spills. Environmental monitor patrol lease and roads. Contractor appear fit for duty.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> - Pull and lay down (131) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m, Rig down 114 mm tubing handling equipment. - Rig in 73 mm tubing handling equipment. Pull and lay down (4) Joints Tubing 73 mm x 36.88 m J-55 9.67 kg/m with Slim Hole Couplers. Rig down 73 mm tubing handling equipment. - Rig in 60.3 mm tubing handling equipment. Pull and lay down (15) Joints Tubing 60.3 mm x 140.38 m J-55 6.99 kg/m. Rig down 60.3 mm tubing handling equipment. <p>**NOTE** End of 60.3 mm tubing shows heavy wear from trying to get into the 114 mm Cut Tubing at 1812 mKB.</p> <ul style="list-style-type: none"> - Cascade haul 27.5 m³ emulsion to Secure High Level 01-14-73-17W5. Reliance Wire Line travel from Ft Simpson and spot on site. MGM Camp at KM 16. Cascade hot oiler and Weatherford Tool hand travel to base in GP. - Winterize, lines, pump and wellhead. SDFN rig crew. - Boiler hand maintain heat on wellhead, tank farm and equipment for night. - End report for day.
2/12/2024	<p>HSE Summary: No incidents, accidents or spills. Environmental monitor patrol lease and roads. Contractor appear fit for duty.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> - Rig in wire line adapter flange and flow tee on top of 179 mm - 34.5 MPa BOP. Secure communications on site and access to site. Run CCL / 178 mm Weatherford 10K Cement Retainer. Correlate to down hole diagram dated 3/01/2013. Fluid level 255 mKB. Set Weatherford Cement Retainer 1810 mKB x 09:15 hrs. Pull CCL / Setting Tool. Rig down wire line unit and travel to MGM KM16 Base. <p>**NOTE** 178.4 mm Casing Collars at 1811.50 mKB and 1797.2 mKB</p> <ul style="list-style-type: none"> - Run in Weatherford Cement Retainer Stinger x 0.7 m, (1) Centralizer 143 mm x 73 mm x 0.28 m, (2) Joints Tubing 73 mm x 19.02 m J-55 9.67 kg/m, (1) Pup Joint 73 mm x 3.08 m J-55 9.67 kg/m, (1) Pup Joint 73 mm x 1.24 m J-55 9.67 kg/m, (1) cross over Sub 73 mm x 88.9 mm x 114.3 mm x 0.42 m, (148) Joints Tubing 114.3 mm x 1785.15 m LT&C P-110 20.09 kg/m. - Position tubing bottom 1800 mKB. Pump 1.0 m³ fresh (non-saline) water to fill and pressure test 178 mm Casing, Taper 114 mm / 73 mm Tubing String and Weatherford 178 mm - 10K Cement Retainer at 1810 mKB to 10.0 MPa. Held 10 minutes. No leak off. - Lower Taper 114 mm / 73 mm Tubing String and sting into Weatherford 178 mm Cement Retainer at 1810 mKB. Set 5000 daN weight on retainer. Pressure test 178 mm Casing, Taper 114 mm / 73 mm Tubing String and Cement Retainer Seal to 10 MPa. Held 10 minutes. Bleed off pressure. - Pull and lay down (5) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m. Drop fluid level to 20 mKB. Position tubing bottom 1751 mKB. - Winterize, lines, pump and wellhead. SDFN rig crew. - Boiler hand maintain heat on wellhead, tank farm and equipment for night. - End report for day.
2/13/2024	<p>HSE Summary: No incidents, accidents or spills. Environmental monitor patrol lease and roads. Contractor appear fit for duty.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> - Cement contractor travel Hay River to Ft Simpson. Operations waiting on cementing contractor. - OROGO inspect site, equipment and abandonment documentation. - Held BOP drill. Review crew response and responsibilities. - Function test 34.5 MPa BOP. System working within specifications. - Winterize, lines, pump and wellhead. SDFN rig crew. - Boiler hand maintain heat on wellhead, tank farm and equipment for night. - End report for day.



ARO Daily Op Summary

Paramount
resources ltd.

Well Name: MGM EAST MACKAY I-78

Well Header

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	License # N2078	State/Province NorthWest Territories	Well Configuration Type Vertical
Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	KB-Ground Distance (m) 5.60	KB-Casing Flange Distance (m) 4.80	Spud Date 1/27/2013	Rig Release Date 2/25/2013

Daily Operations

Start Date	Summary
2/14/2024	<p>HSE Summary: No incidents, accidents or spills. Environmental monitor patrol lease and roads. Contractor appear fit for duty.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> - Run in (4) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m, (2) Pup Joints 114.3 mm x 1.24 m LT&C P-110 20.09 kg/m and (2) Pup Joints 114.3 mm x 1.24 m LT&C P-110 20.09 kg/m. - Position tubing bottom 1809 mKB. Pump 1.0 m³ fresh (non-saline) water to break forward circulation 500 L/min x 3.1 MPa. - Lower Taper 114 mm / 73 mm Tubing String and sting into Weatherford 178 mm Cement Retainer at 1810 mKB. Set 5000 daN weight on retainer. - Injection Rate # 1: 75 L/min x 2.5 m³ fresh (non-saline) water in 40 minutes. Pressure climb to 19.0 MPa. Stop. pressure drop to 6 MPa in 5 minutes. - Injection Rate # 2: 75 L/min x 1.12 m³ fresh (non-saline) water in 15 minutes. Pressure start 6 MPa. Pressure climb to 20.0 MPa. Stop. pressure drop to 9 MPa in 10 minutes. - Injection Rate # 3: 75 L/min x 0.225 m³ fresh (non-saline) water in 3 minutes. Pressure start 9 MPa. Pressure climb to 20.0 MPa. Stop. pressure drop to 14.5 MPa in 5 minutes. - Bleed down well pressure. Pull up Tubing String and sting out of Weatherford 10K Cement Retainer. Position tubing string bottom 1808 mKB. - Perform 5 m slip n cut of drill line. - Environmental and Climate Change field inspection team travel and inspect site. - Winterize, lines, pump and wellhead. SDFN rig crew. - Charger Cementing travel to MGM Km #16 camp. - Boiler hand maintain heat on wellhead, tank farm and equipment for night. - End report for day.
2/15/2024	<p>HSE Summary: No incidents, accidents or spills. Environmental monitor patrol lease and roads. Contractor appear fit for duty.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> - Rig in Cement Unit. Test pump line 25.0 MPa. Pump 2.0 m³ ThixoFine + 0.05% CHFR-1 + 0.6% CHRT-L x 1700 kg/m³ cement slurry. Yield 1.32 m³/t. Fluid loss 50 cc/30 min. Work time 2.5 hrs. Mix and pump Charger SQ = 1% CHGC-2 + 0.3% CHRT-L x 1700 kg/m³ cement slurry. Yield 0.970 m³/t. Fluid loss 50 cc/30 min. Work time 2.8 hrs. Pump rate 450 L/min x ? MPa. Displace behind (2) cement slurry 8.6 m³ fresh (non-saline) water 25°C. - Sting into Weatherford 10K Cement Retainer 1810.0 mKB. Set down 5,000 dan string weight on cement retainer. - Squeeze 0.40 m³ fresh (non-saline) water x 150 - 45 L/min x 14.5 MPa. Cement is now below the Cement Retainer 1810 mKB. - Squeeze 2.0 m³ ThixoFine x 1700 kg/m³ cement slurry in to formation 45 L/min - 60 L/min x 20 MPa (average). Squeeze 1.032 m³ Charger SQ x 1700 kg/m³ cement slurry in to formation 50 L/min x 20 MPa. Pressure climb to 22.8 MPa. Stop pump. Pressure 22.3 MPa after 10 minutes - Sting out Cement Retainer. Tubing bottom 1809 mKB. Circulate and balance cement plug 1810 mKB to 1710 mKB. Rig down pump line. - Lay down (20) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m. Tubing bottom 1570 mKB. - Pressure test casing and cement plug 7.3 MPa. Held 10 min. Pressure end 6.93 MPa. Good test. - Reverse circulate 20 m³ (total) fresh (non-saline) water at 500 L/min x 3.0 MPa. Returns show salinity 0 ppm. End returns are clean fresh (non-saline) water. Entire hole displaced to non-saline (fresh) water. Rig down circulation lines. Rig out and release cement units. Charger Cementing travel to MGM Km #16 camp. - Lay down (5) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m. Position tubing bottom 1490 mKB for night. - Winterize, lines, pump and wellhead. SDFN rig crew. - Boiler hand maintain heat on wellhead, tank farm and equipment for night. - End report for day.



ARO Daily Op Summary

Well Name: MGM EAST MACKAY I-78

Well Header

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	License # N2078	State/Province NorthWest Territories	Well Configuration Type Vertical
Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	KB-Ground Distance (m) 5.60	KB-Casing Flange Distance (m) 4.80	Spud Date 1/27/2013	Rig Release Date 2/25/2013

Daily Operations

Start Date	Summary
2/16/2024	<p>HSE Summary: No incidents, accidents or spills. Environmental monitor patrol lease and roads. Contractor appear fit for duty.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> - Run in (19) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m, Tag cement top 1717 mKB with 1800 daN weight. - Pull and lay down (2) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m. Tubing bottom 1693 mKB. - Forward circulate 15 minute at 500 L/min x 8.7 MPa with fresh (non-saline) water. Return clean non-saline water. - Pressure test 177.8 mm casing and cement plug to 7100 KPa. Held 10 minutes. Pressure end at 7050 KPa. Good test. Bleed off pressure. - Pull and lay down (140) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m. Release Dash Energy Services and equipment. - Change tubing handling equipment from 114 mm to 73 mm. Lay down (1) cross over Sub 73 mm x 88.9 mm x 114.3 mm x 0.42 m, (1) Pup Joint 73 mm x 1.24 m J-55 9.67 kg/m, (1) Pup Joint 73 mm x 3.08 m J-55 9.67 kg/m, (2) Joints Tubing 73 mm x 19.02 m J-55 9.67 kg/m, (1) Centralizer 143 mm x 73 mm x 0.28 m and (1) Weatherford 73 mm Cement Stinger. - Pump 2.3 m³ fresh (non-saline) water to fill casing to 110 mKB. - Rig down working floor, 34.5 MPa - Class III BOP, 279 mm x 179 mm - 34.5 MPa Adapter Flange and tubing handling equipment. Rig down accumulator lines. - Install 179 mm - 34.5 MPa x 103 mm - 69 MPa Adapter Flange with Single 103 mm - 69 MPa Master Valve. Secure wellhead. - De Pressure and drain 80 HP boiler. Empty and clean out (2) 63 m³ tanks and rig tank. Release vac unit to travel to High level Secure Disposal. - Start rig down PWS # 891 and support equipment. No night boiler hand. - End report for day.
2/17/2024	<p>HSE Summary: No incidents, accidents or spills. Environmental monitor patrol lease and roads. Contractor appear fit for duty.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> - Complete rig down and prepare for transportation PWS # 891 and support equipment. Clean and secure site. - Travel PWS # 891 to Norman Wells. Secure rig in PWS yard. Rig crew to put equipment back in storage. - Load and travel PWS doghouse, rig pump, rig tank and materials skid to yard in Norman Wells. Travel PWS 80 HP boiler to staging area on MGM Energy KM 16 camp. Cut n cap welder travel to Ft Simpson. - Stack and prepare equipment on site for transport (4) light towers, bathroom, office building, garbage bin, rig matting, (2) 63 m³ insulated tanks, fuel skid, - Haul to Norman Wells for sale of (148) Joints Tubing Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m and (2) Cut Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m to Goodfellas Oilfield Supply. - End report for day.
2/18/2024	<p>HSE Summary: No incidents, accidents or spills. Environmental monitor patrol lease and roads. Contractor appear fit for duty.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> - Rig crew fly to Yellowknife. Welder travel from Ft Simpson to MGM KM # 16 camp. - End of report for day. - Load and travel to Norman Wells for sale of (148) Joints Tubing Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m and (2) Cut Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m to Goodfellas Oilfield Supply. - Load and haul (2) 63 m³ tanks, (1) office, (1) bathroom, (1) garbage bin, (2) pipe racks, (4) light towers and (1) loader back to base. - Haul track hoe to site. No visible bubbles around wellhead. Swept area and around wellhead for LEL. None detected. Test Production Casing and Surface Casing for LEL. None detected. - Confirm no existence of underground lines near well centre. - Track hoe dig bellhole around wellhead to depth of 3.0 m. Ensure proper sloping and stairway exit. Spoil pile is on plastic and proper spacing away from bellhole. Pull out 0.60 m Rat Hole pipe. Stantech field representative obtain wall and base samples as per program. Secure bellhole for night. - End of report for day.



ARO Daily Op Summary

Well Name: MGM EAST MACKAY I-78

Well Header

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	License # N2078	State/Province NorthWest Territories	Well Configuration Type Vertical
Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	KB-Ground Distance (m) 5.60	KB-Casing Flange Distance (m) 4.80	Spud Date 1/27/2013	Rig Release Date 2/25/2013

Daily Operations

Start Date	Summary
2/19/2024	<p>HSE Summary: No incidents, accidents or spills. Environmental monitor patrol lease and roads. Contractor appear fit for duty.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> - Rig crew fly to Yellowknife to Edmonton. Crew travel home. Journey management complete. - No visible bubbles around wellhead. Swept area and around wellhead for LEL. None detected. Test Production Casing and Surface Casing for LEL. None detected. - Cut away 2.4 m (7.20 mKB) of 406 mm conductor. Cement between conductor and surface casing. Cut window in 244.5 mm Surface Casing and 177.8 mm Production Casing. Cement between Surface Casing and Production Casing at surface. Cut 177.8 mm Production Casing 2.3 m (7.15 mKB) and 244.5 mm Surface Casing at 2.35 m (7.15mKB) depth below surface casing flange. - Remove wellhead from bell hole. Stitch (vent) weld 6.3 mm plate on top of Production Casing and Surface Casing. Weld write I-78 / N2078 on 244.5 mm Production Casing cap. - Install snow fence barrier around bell hole. Haul 52 tonne dirt from bell hole. - Wait on ground sampling analysis from around wellhead to determine if able to back fill. - End report for day.
2/23/2024	<p>HSE Summary: No incidents, accidents or spills. Environmental monitor patrol lease and roads. Contractor appear fit for duty.</p> <p>Operations Summary:</p> <ul style="list-style-type: none"> - Remove bell hole isolation fencing. - Back fill and tamp bellhole. Rough level surface ground. - Install (orange)Tombomstone Surface Marker onto 73 mm pipe. Pipe is anchored and located 1.0 m x North of well centre. Weld write on tombstone marker. MGM Energy. 300/I-78-6450-12530/00. WID = N2078. 64°47'42.421"N. 125°43'19.1"W. 19-feb-2024. NAD 27 - Cut n Cap job completed. Release contractors. - Rig down and release camp. - Job completed. <p>*** Adjust final costs as received***</p>



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 1/31/2024
Report #: 1

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078			
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical				
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00					
Casing Strings								
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)			
Conductor	1/31/2013	20.00	5.70	14.30	406.0			
Surface	2/10/2013	402.00	5.70	396.30	244.5			
Production	2/25/2013	1,988.00	5.70	1,982.30	177.8			
Liner	3/1/2013	1,964.97						
Zones / Event Sequence								
Zone Name		Zone Code		Current Status				
Canol	/00							
Blue Fish	/00							
Job Information / AFE								
Objective	Well Abandonment. Program will commence after access and camp are prepared. No SCVF's have been reported or expected.							
PROGRAM SUMMARY	Read & record SIP(s). MIRU Service Rig, P-tank and associated equipment							
Investigate status of SCVF/GM.								
Rig in wellhead service and lubricator. Pull Cameron back pressure valve.								
MIRU slick line unit. Pull A-3 tubing plug from 21mcf. Pressure test tubing to 7000 Kpa with water prior to pulling plug. Pull PX plug and prong from X profile at 1349.5m KB. Tag and record PBTD depth with blind box. Perforate hole in tubing above the upper packer. Rig out slick line.								
Bleed off pressure to test P-tank. Circulate well to 6% KCL water (if needed) and kill well. Remove wellhead and install BOP's.								
Unset hydraulic packers and pull tubing out of the hole. Lay down any bad joints.								
RIH bit and scraper for 177.8mm casing on 73mm tubing string to PBTD. Circulate clean. Pull bit and scraper.								
Run in hole with 73mm tubing and tag PBTD. Pull off bottom for cement job.								
Rig in cementers and balance a 200-meter cement plug. Pull above plug and circulate to fresh water. Apply squeeze pressure. Wait on cement overnight.								
Tag cement plug and record depth (Minimum of 15 meters above top perforation required). Pressure test to 7000 Kpa for 10 minutes. Bleed off pressure and pull tubing.								
RIH with permanent bridge plug for 177.8mm casing on 73mm tubing string. Set bridge plug within 15m of tagged cement top. Pressure test bridge plug to 7000 Kpa for 10 minutes. Rotate off plug and balance 1m3 cement plug on bridge plug. Backwash with fresh water.								
Pull out of hole and lay down tubing string.								
Cut and cap the casing strings with vented cap.								
Costs do not include access, camp or any associated SEQR								
Target Formation Hume								
Daily Pressures								
Subtype				P (kPa)				
Operation Summary								
Operations Next Report Period								
WSS travel from Grande Prairie to Ft Simpson.								
Operation at 6am								
Wait on daylight.								
24 Hr Operational Comments								
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details	
00:00	08:00	8.00	8.00	No Job Activity	PP		No activity on site	
08:00	16:00	8.00	16.00	TTLY	PP		Meet and review operations with Cameron, Reliance Wireline, McClelland Rentals, Precision Well Servicing, Cascade Trucking and Weatherford completions. Review job scope and operations with contractors.	
							WSS load up rental material form McClelland Rentals in personal truck.	
							End report for day	
16:00	00:00	8.00	24.00	WOD	PP		Wait on daylight.	
6:00 Update						Operation Details		
Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT			
00:00	06:00	6.00		PP			Wait on daylight	



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 1/31/2024
Report #: 1

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical	
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00	
Other In Hole					
Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement Retainer		159.4	1,810.00	1,810.30	2/12/2024 09:15
Cement		178.0	1,810.30	1,812.32	2/15/2024 14:30
Cement		96.0	1,812.30	1,884.00	2/15/2024 14:31
Cement		165.0	1,717.00	1,810.00	2/15/2024 14:32
Fresh Water (Permanent)		165.0	100.00	1,717.00	2/16/2024 07:00
Steel Plate		406.0	7.10	7.20	2/19/2024 14:30
Glacier Tile		407.0	5.60	7.10	2/19/2024 14:31
Bill 30 Requirements (Head Count Only)					
Type			Count		
Day Shift					1
Contractor Hours (Head Count & Hours)					
Type			Count		Reg Work Time (hr)
Flare Permit					
Contract # C05380 C	Agreement Start Date 7/25/2016		Agreement End Date		
Flaring Volumes					
Type	Subtype	Des	Amount		Units
		No Gas Flared			
Weather & Road Condition					
Weather		T (°C)		Road Cond	
Partly Cloudy		-8		Fair	



Daily ARO Operations

Well: MGM EAST MACKAY I-78

Pad: I-78-6450-12530

Business Unit: Strategic Investments

Rig:

Report Date: 2/1/2024

Report #: 2

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
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Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical
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KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00
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Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/31/2013	20.00	5.70	14.30	406.0				
Surface	2/10/2013	402.00	5.70	396.30	244.5				
Production	2/25/2013	1,988.00	5.70	1,982.30	177.8				
Liner	3/1/2013	1,964.97							

Zones / Event Sequence

Zone Name	Zone Code	Current Status
Canol	/00	
Blue Fish	/00	

Job Information / AFE

Objective
Well Abandonment. Program will commence after access and camp are prepared. No SCVF's have been reported or expected.

PROGRAM SUMMARY

Read & record SIP(s). MIRU Service Rig, P-tank and associated equipment

Investigate status of SCVF/GM.

Rig in wellhead service and lubricator. Pull Cameron back pressure valve.

MIRU slick line unit. Pull A-3 tubing plug from 21mcf. Pressure test tubing to 7000 Kpa with water prior to pulling plug. Pull PX plug and prong from X profile at 1349.5m KB. Tag and record PBTD depth with blind box. Perforate hole in tubing above the upper packer. Rig out slick line.

Bleed off pressure to test P-tank. Circulate well to 6% KCL water (if needed) and kill well. Remove wellhead and install BOP's.

Unset hydraulic packers and pull tubing out of the hole. Lay down any bad joints.

RIH bit and scraper for 177.8mm casing on 73mm tubing string to PBTD. Circulate clean. Pull bit and scraper.

Run in hole with 73mm tubing and tag PBTD. Pull off bottom for cement job.

Rig in cementers and balance a 200-meter cement plug. Pull above plug and circulate to fresh water. Apply squeeze pressure. Wait on cement overnight.

Tag cement plug and record depth (Minimum of 15 meters above top perforation required). Pressure test to 7000 Kpa for 10 minutes. Bleed off pressure and pull tubing.

RIH with permanent bridge plug for 177.8mm casing on 73mm tubing string. Set bridge plug within 15m of tagged cement top. Pressure test bridge plug to 7000 Kpa for 10 minutes. Rotate off plug and balance 1m3 cement plug on bridge plug. Backwash with fresh water.

Pull out of hole and lay down tubing string.

Cut and cap the casing strings with vented cap.

Costs do not include access, camp or any associated SEQR

Target Formation Hume

Daily Pressures

Subtype	P (kPa)

Operation Summary

Operations Next Report Period

WSS travel to I-78 camp.

Operation at 6am

Wait on daylight

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	06:00	6.00	6.00	WOD	PP		Wait on daylight
06:00	18:30	12.50	18.50	TTLY	PP		Start day travel management notification with Calgary. Travel from Grande Prairie to Ft Simpson. End day travel management notification with Calgary. End report for day.
18:30	00:00	5.50	24.00	WOD	PP		Wait on daylight

6:00 Update

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00		PP		Wait on daylight.



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/1/2024
Report #: 2

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical	
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00	
Other In Hole					
Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement Retainer		159.4	1,810.00	1,810.30	2/12/2024 09:15
Cement		178.0	1,810.30	1,812.32	2/15/2024 14:30
Cement		96.0	1,812.30	1,884.00	2/15/2024 14:31
Cement		165.0	1,717.00	1,810.00	2/15/2024 14:32
Fresh Water (Permanent)		165.0	100.00	1,717.00	2/16/2024 07:00
Steel Plate		406.0	7.10	7.20	2/19/2024 14:30
Glacier Tile		407.0	5.60	7.10	2/19/2024 14:31
Bill 30 Requirements (Head Count Only)					
Type			Count		
Day Shift					1
Contractor Hours (Head Count & Hours)					
Type			Count		Reg Work Time (hr)
Flare Permit					
Contract # C05380 C	Agreement Start Date 7/25/2016		Agreement End Date		
Flaring Volumes					
Type	Subtype	Des	Amount		Units
		No Gas Flared			
Weather & Road Condition					
Weather		T (°C)		Road Cond	
Partly Cloudy		-15		Fair	



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/2/2024
Report #: 3

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
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Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical
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KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00
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Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/31/2013	20.00	5.70	14.30	406.0				
Surface	2/10/2013	402.00	5.70	396.30	244.5				
Production	2/25/2013	1,988.00	5.70	1,982.30	177.8				
Liner	3/1/2013	1,964.97							

Zones / Event Sequence

Zone Name	Zone Code	Current Status
Canol	/00	
Blue Fish	/00	

Job Information / AFE

Objective
Well Abandonment. Program will commence after access and camp are prepared. No SCVF's have been reported or expected.

PROGRAM SUMMARY

Read & record SIP(s). MIRU Service Rig, P-tank and associated equipment

Investigate status of SCVF/GM.

Rig in wellhead service and lubricator. Pull Cameron back pressure valve.

MIRU slick line unit. Pull A-3 tubing plug from 21mcf. Pressure test tubing to 7000 Kpa with water prior to pulling plug. Pull PX plug and prong from X profile at 1349.5m KB. Tag and record PBTD depth with blind box. Perforate hole in tubing above the upper packer. Rig out slick line.

Bleed off pressure to test P-tank. Circulate well to 6% KCL water (if needed) and kill well. Remove wellhead and install BOP's.

Unset hydraulic packers and pull tubing out of the hole. Lay down any bad joints.

RIH bit and scraper for 177.8mm casing on 73mm tubing string to PBTD. Circulate clean. Pull bit and scraper.

Run in hole with 73mm tubing and tag PBTD. Pull off bottom for cement job.

Rig in cementers and balance a 200-meter cement plug. Pull above plug and circulate to fresh water. Apply squeeze pressure. Wait on cement overnight.

Tag cement plug and record depth (Minimum of 15 meters above top perforation required). Pressure test to 7000 Kpa for 10 minutes. Bleed off pressure and pull tubing.

RIH with permanent bridge plug for 177.8mm casing on 73mm tubing string. Set bridge plug within 15m of tagged cement top. Pressure test bridge plug to 7000 Kpa for 10 minutes. Rotate off plug and balance 1m3 cement plug on bridge plug. Backwash with fresh water.

Pull out of hole and lay down tubing string.

Cut and cap the casing strings with vented cap.

Costs do not include access, camp or any associated SEQR

Target Formation
Hume

Daily Pressures

Subtype	P (kPa)

Operation Summary

Operations Next Report Period

WSS inspect site. Position tanks and rentals. Wait on rig.

Operation at 6am

Wait on daylight.

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00	7.00	WOD	PP		Wait on daylight.
07:00	17:00	10.00	17.00	TTLY	PP		Start day travel management notification with Calgary at 0700 hrs. Travel on winter access ice road from Ft Simpson to camp. End day travel management notification with Calgary at 1700 hrs. - Discuss rentals and road access with construction supervisor. - End report for day.
17:00	18:00	1.00	18.00	Safety Mtg	PP		Held safety and operational meeting with construction supervisor. Review camp and area ERP. Review road access and weights. Discuss contractor rentals and scheduling. End of report for day.
18:00	00:00	6.00	24.00	WOD	PP		Wait on daylight.



Daily ARO Operations

Well: MGM EAST MACKAY I-78

Pad: I-78-6450-12530

Business Unit: Strategic Investments

Rig:

Report Date: 2/2/2024

Report #: 3

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
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Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical
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KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00
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6:00 Update

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00		PP		Wait on daylight

Other In Hole

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement Retainer		159.4	1,810.00	1,810.30	2/12/2024 09:15
Cement		178.0	1,810.30	1,812.32	2/15/2024 14:30
Cement		96.0	1,812.30	1,884.00	2/15/2024 14:31
Cement		165.0	1,717.00	1,810.00	2/15/2024 14:32
Fresh Water (Permanent)		165.0	100.00	1,717.00	2/16/2024 07:00
Steel Plate		406.0	7.10	7.20	2/19/2024 14:30
Glacier Tile		407.0	5.60	7.10	2/19/2024 14:31

Bill 30 Requirements (Head Count Only)

Type	Count
Day Shift	2

Contractor Hours (Head Count & Hours)

Type	Count	Reg Work Time (hr)

Flare Permit

Contract # C05380 C	Agreement Start Date 7/25/2016	Agreement End Date
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Flaring Volumes

Type	Subtype	Des	Amount	Units
		No Gas Flared		

Weather & Road Condition

Weather	T (°C)	Road Cond
Overcast	-19	Fair



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/3/2024
Report #: 4

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078					
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical						
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00							
Casing Strings										
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)					
Conductor	1/31/2013	20.00	5.70	14.30	406.0					
Surface	2/10/2013	402.00	5.70	396.30	244.5					
Production	2/25/2013	1,988.00	5.70	1,982.30	177.8					
Liner	3/1/2013	1,964.97								
Zones / Event Sequence										
Zone Name		Zone Code		Current Status						
Canol	/00									
Blue Fish	/00									
Job Information / AFE										
Objective	Well Abandonment. Program will commence after access and camp are prepared. No SCVF's have been reported or expected.									
PROGRAM SUMMARY	Read & record SIP(s). MIRU Service Rig, P-tank and associated equipment									
Investigate status of SCVF/GM.										
Rig in wellhead service and lubricator. Pull Cameron back pressure valve.										
MIRU slick line unit. Pull A-3 tubing plug from 21mcf. Pressure test tubing to 7000 Kpa with water prior to pulling plug. Pull PX plug and prong from X profile at 1349.5m KB. Tag and record PBTD depth with blind box. Perforate hole in tubing above the upper packer. Rig out slick line.										
Bleed off pressure to test P-tank. Circulate well to 6% KCL water (if needed) and kill well. Remove wellhead and install BOP's.										
Unset hydraulic packers and pull tubing out of the hole. Lay down any bad joints.										
RIH bit and scraper for 177.8mm casing on 73mm tubing string to PBTD. Circulate clean. Pull bit and scraper.										
Run in hole with 73mm tubing and tag PBTD. Pull off bottom for cement job.										
Rig in cementers and balance a 200-meter cement plug. Pull above plug and circulate to fresh water. Apply squeeze pressure. Wait on cement overnight.										
Tag cement plug and record depth (Minimum of 15 meters above top perforation required). Pressure test to 7000 Kpa for 10 minutes. Bleed off pressure and pull tubing.										
RIH with permanent bridge plug for 177.8mm casing on 73mm tubing string. Set bridge plug within 15m of tagged cement top. Pressure test bridge plug to 7000 Kpa for 10 minutes. Rotate off plug and balance 1m3 cement plug on bridge plug. Backwash with fresh water.										
Pull out of hole and lay down tubing string.										
Cut and cap the casing strings with vented cap.										
Costs do not include access, camp or any associated SEQR										
Target Formation Hume										
Daily Pressures										
Subtype				P (kPa)						
Operation Summary										
Operations Next Report Period										
Wait on rig. Contractors to travel to Ft Simpson.										
Operation at 6am										
Wait on daylight										
24 Hr Operational Comments										
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details			
00:00	07:00	7.00	7.00	WOD	PP		Wait on daylight			
07:00	07:30	0.50	7.50	Safety Mtg	PP		Held safety and operational meeting. Review contractor policies and procedures for setup of equipment. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.			
07:30	17:00	9.50	17.00	RU/RD	PP		Spot rig matting for tank farm. Setup (2) 63 m ³ insulated tanks. Setup field office, meeting room and bathroom. Spot and rig in light towers. Confirm PWS Rig 412 doing repairs in Norman Wells in preparation for 5-Jan-2024 job start.			
							Tulita Environmental Monitor representative to monitor site and road for wildlife.			
							End of report for day.			
17:00	00:00	7.00	24.00	WOD	PP		Wait on daylight.			
6:00 Update						Operation Details				
Start Time	End Time	Dur (hr)		Time Code	Ops Category	NPT				
00:00	06:00	6.00			PP		Wait on daylight			



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/3/2024
Report #: 4

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
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Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical
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KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00
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Other In Hole

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement Retainer		159.4	1,810.00	1,810.30	2/12/2024 09:15
Cement		178.0	1,810.30	1,812.32	2/15/2024 14:30
Cement		96.0	1,812.30	1,884.00	2/15/2024 14:31
Cement		165.0	1,717.00	1,810.00	2/15/2024 14:32
Fresh Water (Permanent)		165.0	100.00	1,717.00	2/16/2024 07:00
Steel Plate		406.0	7.10	7.20	2/19/2024 14:30
Glacier Tile		407.0	5.60	7.10	2/19/2024 14:31

Bill 30 Requirements (Head Count Only)

Type	Count
Day Shift	1

Contractor Hours (Head Count & Hours)

Type	Count	Reg Work Time (hr)

Flare Permit

Contract # C05380 C	Agreement Start Date 7/25/2016	Agreement End Date
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Flaring Volumes

Type	Subtype	Des	Amount	Units
		No Gas Flared		

Weather & Road Condition

Weather	T (°C)	Road Cond
Overcast	-37	Fair



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/4/2024
Report #: 5

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078					
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical						
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00						
Casing Strings										
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread	
Conductor	1/31/2013	20.00	5.70	14.30	406.0					
Surface	2/10/2013	402.00	5.70	396.30	244.5					
Production	2/25/2013	1,988.00	5.70	1,982.30	177.8					
Liner	3/1/2013	1,964.97								
Zones / Event Sequence										
Zone Name	Zone Code	Current Status								
Canol	/00									
Blue Fish	/00									
Job Information / AFE										
Objective	Well Abandonment. Program will commence after access and camp are prepared. No SCVF's have been reported or expected.									
PROGRAM SUMMARY	Read & record SIP(s). MIRU Service Rig, P-tank and associated equipment									
Investigate status of SCVF/GM.										
Rig in wellhead service and lubricator. Pull Cameron back pressure valve.										
MIRU slick line unit. Pull A-3 tubing plug from 21mcf. Pressure test tubing to 7000 Kpa with water prior to pulling plug. Pull PX plug and prong from X profile at 1349.5m KB. Tag and record PBTD depth with blind box. Perforate hole in tubing above the upper packer. Rig out slick line.										
Bleed off pressure to test P-tank. Circulate well to 6% KCL water (if needed) and kill well. Remove wellhead and install BOP's.										
Unset hydraulic packers and pull tubing out of the hole. Lay down any bad joints.										
RIH bit and scraper for 177.8mm casing on 73mm tubing string to PBTD. Circulate clean. Pull bit and scraper.										
Run in hole with 73mm tubing and tag PBTD. Pull off bottom for cement job.										
Rig in cementers and balance a 200-meter cement plug. Pull above plug and circulate to fresh water. Apply squeeze pressure. Wait on cement overnight.										
Tag cement plug and record depth (Minimum of 15 meters above top perforation required). Pressure test to 7000 Kpa for 10 minutes. Bleed off pressure and pull tubing.										
RIH with permanent bridge plug for 177.8mm casing on 73mm tubing string. Set bridge plug within 15m of tagged cement top. Pressure test bridge plug to 7000 Kpa for 10 minutes. Rotate off plug and balance 1m3 cement plug on bridge plug. Backwash with fresh water.										
Pull out of hole and lay down tubing string.										
Cut and cap the casing strings with vented cap.										
Costs do not include access, camp or any associated SEQR										
Target Formation Hume										
Daily Pressures										
Subtype						P (kPa)				
SICP										
SITP										
Operation Summary										
Operations Next Report Period										
PWS Rig # 891 and contractors to travel to site. Spot and rig up rig and support equipment.										
Operation at 6am										
Wait on daylight.										
24 Hr Operational Comments										
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details			
00:00	06:00	6.00	6.00	WOD	PP		Wait on daylight			
06:00	18:00	12.00	18.00	TTLY	PP		Cameron wellhead crew took Hwy 97 between Ft Nelson and Ft Laird. Should of taken Hwy 77. Crew back trac to Ft Nelson to spend night. Resume travel operations to site on 5-February.			
							Reliance Wire Line crew, Cascade Hot Oiler, Dash Tong crew and Weatherford tool hand travel to Ft Simpson.			
							Precision Rig 412 complete shop repairs and prepare rig and support equipment to travel from Norman Wells to site on 5-February.			
							End of report for day.			
18:00	00:00	6.00	24.00	WOD	PP		Wait on daylight.			



Daily ARO Operations

Well: MGM EAST MACKAY I-78

Pad: I-78-6450-12530

Business Unit: Strategic Investments

Rig:

Report Date: 2/4/2024

Report #: 5

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
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Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical
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KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00
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6:00 Update

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00		PP		Wait on daylight.

Other In Hole

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement Retainer		159.4	1,810.00	1,810.30	2/12/2024 09:15
Cement		178.0	1,810.30	1,812.32	2/15/2024 14:30
Cement		96.0	1,812.30	1,884.00	2/15/2024 14:31
Cement		165.0	1,717.00	1,810.00	2/15/2024 14:32
Fresh Water (Permanent)		165.0	100.00	1,717.00	2/16/2024 07:00
Steel Plate		406.0	7.10	7.20	2/19/2024 14:30
Glacier Tile		407.0	5.60	7.10	2/19/2024 14:31

Bill 30 Requirements (Head Count Only)

Type	Count
Day Shift	10

Contractor Hours (Head Count & Hours)

Type	Count	Reg Work Time (hr)

Flare Permit

Contract # C05380 C	Agreement Start Date 7/25/2016	Agreement End Date
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Flaring Volumes

Type	Subtype	Des	Amount	Units
		No Gas Flared		

Weather & Road Condition

Weather	T (°C)	Road Cond
Clear	-39	Fair



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/5/2024
Report #: 6

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
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Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical
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KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00
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Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/31/2013	20.00	5.70	14.30	406.0				
Surface	2/10/2013	402.00	5.70	396.30	244.5				
Production	2/25/2013	1,988.00	5.70	1,982.30	177.8				
Liner	3/1/2013	1,964.97							

Zones / Event Sequence

Zone Name	Zone Code	Current Status
Canol	/00	
Blue Fish	/00	

Job Information / AFE

Objective	Well Abandonment. Program will commence after access and camp are prepared. No SCVF's have been reported or expected.
PROGRAM SUMMARY	
Read & record SIP(s). MIRU Service Rig, P-tank and associated equipment	
Investigate status of SCVF/GM.	
Rig in wellhead service and lubricator. Pull Cameron back pressure valve.	
MIRU slick line unit. Pull A-3 tubing plug from 21mcf. Pressure test tubing to 7000 Kpa with water prior to pulling plug. Pull PX plug and prong from X profile at 1349.5m KB. Tag and record PBTD depth with blind box. Perforate hole in tubing above the upper packer. Rig out slick line.	
Bleed off pressure to test P-tank. Circulate well to 6% KCL water (if needed) and kill well. Remove wellhead and install BOP's.	
Unset hydraulic packers and pull tubing out of the hole. Lay down any bad joints.	
RIH bit and scraper for 177.8mm casing on 73mm tubing string to PBTD. Circulate clean. Pull bit and scraper.	
Run in hole with 73mm tubing and tag PBTD. Pull off bottom for cement job.	
Rig in cementers and balance a 200-meter cement plug. Pull above plug and circulate to fresh water. Apply squeeze pressure. Wait on cement overnight.	
Tag cement plug and record depth (Minimum of 15 meters above top perforation required). Pressure test to 7000 Kpa for 10 minutes. Bleed off pressure and pull tubing.	
RIH with permanent bridge plug for 177.8mm casing on 73mm tubing string. Set bridge plug within 15m of tagged cement top. Pressure test bridge plug to 7000 Kpa for 10 minutes. Rotate off plug and balance 1m3 cement plug on bridge plug. Backwash with fresh water.	
Pull out of hole and lay down tubing string.	
Cut and cap the casing strings with vented cap.	
Costs do not include access, camp or any associated SEQR	

Target Formation Hume

Daily Pressures	
Subtype	P (kPa)
SICP	
SITP	

Operation Summary

Operations Next Report Period
Continue to field repair rig. Lubricate and remove BPV from tubing hanger.

Operation at 6am
Boiler hand maintain heat on tank farm and equipment.

24 Hr Operational Comments							
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00	7.00	WOD	PP		Wait on daylight.
07:00	07:30	0.50	7.50	Safety Mtg	PP		Held day shift safety and operational meeting. Review contractor policies and procedures for travel and towing of equipment. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.
07:30	12:00	4.50	12.00	TTLY	PP		Reliance Wire Line crew, Cameron Wellhead crew, Cascade Hot Oiler, Dash Tong crew and Weatherford tool hand travel to Ft Simpson. Load and start travel PWS # 891 from Norman Wells. **While waiting for rig and equipment to arrive on site** Haul in 26.5 m ³ non-saline fresh water to site. Heat water to 20 °C. Clear snow from around well centre with loader. Fill in well centre with lease dirt.



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig: 6

Report Date: 2/5/2024
Report #: 6

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical	
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00	

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
12:00	12:30	0.50	12.50	Safety Mtg	PP		Held safety and operational meeting. Review contractor policies and procedures for rig in and setup of equipment. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.
12:30	18:30	6.00	18.50	RU/RD	PP	SRD	<p>PWS Rig # 891 travel to rig camp at KM # 16. Motor issue with rig. HRN mechanic travel from Norman Wells. Determine (2) push rods are bent. Mechanic looking for replacement part.</p> <p>Spot on site PWS 891 support equipment on site as per MGM Energy, contractor, industry and government rules and regulations.</p> <p>Perform 30 minute Surface Casing Vent Flow Bubble Test. No bubbles observed.</p> <p>Rig in support equipment. Perform on going CAODC rig inspection of equipment as rigged in. Run 80 HP boiler lines to wellhead. Cover and heat wellhead and 34.5 MPa x 179.4 mm BOP for night.</p>
18:30	19:00	0.50	19.00	Safety Mtg	PP	SRD	Held night shift safety and operational meeting. Review contractor policies and procedures for work alone and boiler hand to monitor temperature of water and equipment. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.
19:00	00:00	5.00	24.00	WOD	PP		<p>Boiler hand maintain heat on wellhead, tank farm and equipment for night.</p> <p>End report for day.</p>

6:00 Update

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00		PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.

Other In Hole

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement Retainer		159.4	1,810.00	1,810.30	2/12/2024 09:15
Cement		178.0	1,810.30	1,812.32	2/15/2024 14:30
Cement		96.0	1,812.30	1,884.00	2/15/2024 14:31
Cement		165.0	1,717.00	1,810.00	2/15/2024 14:32
Fresh Water (Permanent)		165.0	100.00	1,717.00	2/16/2024 07:00
Steel Plate		406.0	7.10	7.20	2/19/2024 14:30
Glacier Tile		407.0	5.60	7.10	2/19/2024 14:31

Bill 30 Requirements (Head Count Only)

Type	Count
Day Shift	24

Contractor Hours (Head Count & Hours)

Type	Count	Reg Work Time (hr)

Flare Permit

Contract # C05380 C	Agreement Start Date 7/25/2016	Agreement End Date
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Report Fluids Summary

Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)
Water	26.50	0.00	26.50				

Weather & Road Condition

Weather	T (°C)	Road Cond
Clear	-31	Fair



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/6/2024
Report #: 7

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078				
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical					
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00					
Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/31/2013	20.00	5.70	14.30	406.0				
Surface	2/10/2013	402.00	5.70	396.30	244.5				
Production	2/25/2013	1,988.00	5.70	1,982.30	177.8				
Liner	3/1/2013	1,964.97							
Zones / Event Sequence									
Zone Name	Zone Code	Current Status							
Canol	/00								
Blue Fish	/00								
Job Information / AFE									
Objective	Well Abandonment. Program will commence after access and camp are prepared. No SCVF's have been reported or expected.								
PROGRAM SUMMARY	Read & record SIP(s). MIRU Service Rig, P-tank and associated equipment								
Investigate status of SCVF/GM.									
Rig in wellhead service and lubricator. Pull Cameron back pressure valve.									
MIRU slick line unit. Pull A-3 tubing plug from 21mcf. Pressure test tubing to 7000 Kpa with water prior to pulling plug. Pull PX plug and prong from X profile at 1349.5m KB. Tag and record PBTD depth with blind box. Perforate hole in tubing above the upper packer. Rig out slick line.									
Bleed off pressure to test P-tank. Circulate well to 6% KCL water (if needed) and kill well. Remove wellhead and install BOP's.									
Unset hydraulic packers and pull tubing out of the hole. Lay down any bad joints.									
RIH bit and scraper for 177.8mm casing on 73mm tubing string to PBTD. Circulate clean. Pull bit and scraper.									
Run in hole with 73mm tubing and tag PBTD. Pull off bottom for cement job.									
Rig in cementers and balance a 200-meter cement plug. Pull above plug and circulate to fresh water. Apply squeeze pressure. Wait on cement overnight.									
Tag cement plug and record depth (Minimum of 15 meters above top perforation required). Pressure test to 7000 Kpa for 10 minutes. Bleed off pressure and pull tubing.									
RIH with permanent bridge plug for 177.8mm casing on 73mm tubing string. Set bridge plug within 15m of tagged cement top. Pressure test bridge plug to 7000 Kpa for 10 minutes. Rotate off plug and balance 1m3 cement plug on bridge plug. Backwash with fresh water.									
Pull out of hole and lay down tubing string.									
Cut and cap the casing strings with vented cap.									
Costs do not include access, camp or any associated SEQR									
Target Formation Hume									
Daily Pressures									
Subtype	P (kPa)								
SICP	0								
SITP	0								
Operation Summary									
Operations Next Report Period									
Slickline recover bottom hole recorders from 1833 mKB.									
Operation at 6am									
Boiler hand maintain heat on equipment and tank farm									
24 Hr Operational Comments									
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details		
00:00	07:00	7.00	7.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.		
07:00	07:30	0.50	7.50	Safety Mtg	PP	SRD	Held day shift safety and operational meeting. Review contractor policies and procedures for travel, towing, slickline and remove BPV. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.		



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/6/2024
Report #: 7

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical	
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00		

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
07:30	09:00	1.50	9.00	RU/RD	PP	SRD	HRN mechanic and PWS field supervisor repair PWS Rig # 412 at KM 16 Camp. Continue to rig in PWS # 412 support equipment. Off load and start rig in rig pump, tank and (2) lines to wellhead. Off load catwalk, pipe racks and garbage bin. Run hydraulic lines from accumulator to Class III BOP. Stump function test Class III - 34.5 MPa BOP. Normal operating pressure 19000 KPa. Close pipe = 14 seconds. Pressure 17.5 MPa. Close blinds = 12 seconds. Pressure 16.0 MPa. Test pipe rams and blind rams 1.4 MPa (low) and 30 MPa (high). Working with in specifications. 25.75 turn to lock rams closed. Pressure test 114 mm tubing with 0.20 m ³ - 35°C fresh water to 21.0 MPa. Held 10 min
09:00	11:00	2.00	11.00	RU/RD	PP	SRD	Rig in Cameron 103 mm x 69 MPa adapter flange and BPV lubricator. Lubricate out Cameron BPV. No pressure below BPV. Rig down lubricator.
11:00	11:30	0.50	11.50	PRESS	PP	SRD	Pressure test 114 mm tubing with 0.20 m ³ - 35°C fresh water to 21.0 MPa. Held 10 min
11:30	12:30	1.00	12.50	RURDSL	PP	SRD	Rig in wireline and picker. Install adapter flange and wire line 34.5 MPa BOP. Inspect pack off head. Tie 0.125" (3.17 mm) SS Line rope socket. Purge lubricator prior and after each use with N2.
12:30	16:00	3.50	16.00	Slickline Ops	PP	SRD	Run 93 mm Gauge Ring. Tag tubing plug 1813 mKB. Pull Gauge Ring. Run JS Pull Tool. Latch load unseat Prong 1415 hrs. No signs pressure at surface. Pull tool string and Otis Plug. No signs over pull. Run SB Pull Tool. Latch and unseat Plug Body 1515 hrs. Pull Tool String and Otis Plug Body. No signs over pull. Lay down lubricator. Rig out and release picker. Secure wireline unit for night.
16:00	16:30	0.50	16.50	RURDSL	PP		Lay down lubricator. Rig out and release picker. Secure wireline unit for night.
16:30	18:30	2.00	18.50	RU/RD	PP		Spot and rig up PWS # 412 rig and derrick. Centre and secure rig. Rig in work floor. Winterize clean and secure wellhead. Release rig crew.
18:30	19:00	0.50	19.00	Safety Mtg	PP		Held night shift safety and operational meeting. Review contractor policies and procedures for work alone and boiler hand to monitor temperature of water and equipment. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.
19:00	00:00	5.00	24.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night. End report for day.

6:00 Update

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00		PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.

Other In Hole

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement Retainer		159.4	1,810.00	1,810.30	2/12/2024 09:15
Cement		178.0	1,810.30	1,812.32	2/15/2024 14:30
Cement		96.0	1,812.30	1,884.00	2/15/2024 14:31
Cement		165.0	1,717.00	1,810.00	2/15/2024 14:32
Fresh Water (Permanent)		165.0	100.00	1,717.00	2/16/2024 07:00
Steel Plate		406.0	7.10	7.20	2/19/2024 14:30
Glacier Tile		407.0	5.60	7.10	2/19/2024 14:31

Bill 30 Requirements (Head Count Only)

Type	Count
Day Shift	23

Contractor Hours (Head Count & Hours)

Type	Count	Reg Work Time (hr)

Flare Permit

Contract # C05380 C	Agreement Start Date 7/25/2016	Agreement End Date
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Daily ARO Operations

Well: MGM EAST MACKAY I-78

Pad: I-78-6450-12530

Business Unit: Strategic Investments

Rig:

Report Date: 2/6/2024

Report #: 7

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
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Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical
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KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00
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Flaring Volumes

Type	Subtype	Des	Amount	Units
		No Gas Flared		

Report Fluids Summary

Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)
Water	26.50	0.00	26.50				

Weather & Road Condition

Weather	T (°C)	Road Cond
Clear	-29	Fair



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/7/2024
Report #: 8

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
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Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical
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KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00
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Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/31/2013	20.00	5.70	14.30	406.0				
Surface	2/10/2013	402.00	5.70	396.30	244.5				
Production	2/25/2013	1,988.00	5.70	1,982.30	177.8				
Liner	3/1/2013	1,964.97							

Zones / Event Sequence

Zone Name	Zone Code	Current Status
Canol	/00	
Blue Fish	/00	

Job Information / AFE

Objective
Well Abandonment. Program will commence after access and camp are prepared. No SCVF's have been reported or expected.

PROGRAM SUMMARY

Read & record SIP(s). MIRU Service Rig, P-tank and associated equipment

Investigate status of SCVF/GM.

Rig in wellhead service and lubricator. Pull Cameron back pressure valve.

MIRU slick line unit. Pull A-3 tubing plug from 21mcf. Pressure test tubing to 7000 Kpa with water prior to pulling plug. Pull PX plug and prong from X profile at 1349.5m KB. Tag and record PBTD depth with blind box. Perforate hole in tubing above the upper packer. Rig out slick line.

Bleed off pressure to test P-tank. Circulate well to 6% KCL water (if needed) and kill well. Remove wellhead and install BOP's.

Unset hydraulic packers and pull tubing out of the hole. Lay down any bad joints.

RIH bit and scraper for 177.8mm casing on 73mm tubing string to PBTD. Circulate clean. Pull bit and scraper.

Run in hole with 73mm tubing and tag PBTD. Pull off bottom for cement job.

Rig in cementers and balance a 200-meter cement plug. Pull above plug and circulate to fresh water. Apply squeeze pressure. Wait on cement overnight.

Tag cement plug and record depth (Minimum of 15 meters above top perforation required). Pressure test to 7000 Kpa for 10 minutes. Bleed off pressure and pull tubing.

RIH with permanent bridge plug for 177.8mm casing on 73mm tubing string. Set bridge plug within 15m of tagged cement top. Pressure test bridge plug to 7000 Kpa for 10 minutes. Rotate off plug and balance 1m3 cement plug on bridge plug. Backwash with fresh water.

Pull out of hole and lay down tubing string.

Cut and cap the casing strings with vented cap.

Costs do not include access, camp or any associated SEQR

Target Formation
Hume

Daily Pressures

Subtype	P (kPa)
SICP	0
SITP	0

Operation Summary

Operations Next Report Period

Breakapart wellhead. Pickup tubing string to ensure free. Install and test 34.5 MPa BOP.

Operation at 6am

Boiler hand maintain heat on wellhead and tank farm

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00	7.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.
07:00	07:30	0.50	7.50	Safety Mtg	PP		Held day shift safety and operational meeting. Review contractor policies and procedures for travel, towing, slickline, electric line, explosive and injection operations. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.
07:30	08:00	0.50	8.00	RURDSL	PP		Rig in wireline unit. Install Adapter flange and wire line 34.5 MPa BOP. Inspect pack off head. Tie 0.125" (3.17 mm) SS Line rope socket. Purge lubricator prior and after each use with N2.
							SITP 0 KPa. SICP 0 KPa
08:00	09:00	1.00	9.00	Slickline Ops	PP		Run GS Pull Tool. Latch and start pull Dual Steller 10K Bottom Hole Recorders at 08:25 hrs. S/N = 8067. S/N = 80050. Remove lubricator and cap wireline BOP.
							NOTE equipment not on site to down load information. Information to be sent into Calgary ASAP.



Daily ARO Operations

Well: MGM EAST MACKAY I-78
 Pad: I-78-6450-12530
 Business Unit: Strategic Investments
 Rig:

Report Date: 2/7/2024
 Report #: 8

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical	
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00	

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
09:00	09:30	0.50	9.50	INJECT	PP		Tie in pressure line to tubing. Pump 917 L fresh (non-saline) water to fill tubing. Injeciton test: 1st minute = 110L/min x 17.5 MPa in 1 minute 2nd minute = 107 L/min x 18.0 MPa in 1 minute 3rd minute = 102 L/min x 18.5 MPa in 1 minute 4th minute = 68 L/min x 19.0 MPa in 1 minute 5th minute = 12 L/min x 19.0 MPa in 1 minute ISIP 15 MPa. After 1 minute = 14 MPa After 3 minute = 12 MPa.
09:30	12:00	2.50	12.00	Slickline Ops	PP		Run tool string with 56.7 mm Gauge Ring to 1943.5 mKB. Tag obstruction. Pull tool string. Run tool string with 75 mm GS Pull Tool to 1943.5 mKB. Tag obstruction. Pull tool string. Recover no obstruction.
12:00	12:30	0.50	12.50	RURDSL	PP		Rig down lubricator and slick line equipment.
12:30	13:00	0.50	13.00	INJECT	PP		Tie on rig pump line to wellhead. Pressure test line 30 MPa. Held. Fill tubing 0.50 m ³ fresh (non-saline) water to fill tubing. Pressure up tubing string to 28.0 MPa. No feed rate achieved. pressure continue to climb to 31 MPa. Held pressure 10 minutes. Pressure drop to 19 MPa. Bleed off pressure.
13:00	13:30	0.50	13.50	Safety Mtg	PP		Held explosive safety and operaional meeting. Review hazards and controls for perforating. Isolate communications on site and lease access.
13:30	16:00	2.50	16.00	PERF	PP		Makeup in lubricator RTG 43 mm x 1.2 m x 8 SPM x 3.5 gram perforating gun. Run in and correlate on depth to downhole diagram dated 3/1/2013. Perforate 114.3 mm x 20.09 tubing string interval 1805.0 - 1806.2 mKB at 14:47 hrs. Immediate reaction due to wellbore being out of balance. Recover 1.2 m ³ emulsion. Pull tool string and fired perforating gun to surface. Lay down lubricator and fired perforating gun. Insepction show all shots fired. Install cap on wireline 34.5 MPa BOP.
16:00	17:45	1.75	17.75	Circulating	PP		Reverse circulate 40 m ³ non-saline fresh water down casing and up tubing at 400 L/min x 15 MPa. Return 37 m ³ emulsion then 2.0 m ³ non-saline fresh water. Final returns are non-saline fresh water.
17:45	18:30	0.75	18.50	RU/RD	PP		Rig down and winterize circulation lines and tanks. Rig out stairs and working floor. Winterize clean and secure wellhead. Release rig crew.
18:30	19:00	0.50	19.00	Safety Mtg	PP		Held night shift safety and operational meeting. Review contractor policies and procedures for work alone and boiler hand to monitor temperature of water and equipment. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.
19:00	00:00	5.00	24.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night. End report for day.

6:00 Update

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00		PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.

Other In Hole

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement Retainer		159.4	1,810.00	1,810.30	2/12/2024 09:15
Cement		178.0	1,810.30	1,812.32	2/15/2024 14:30
Cement		96.0	1,812.30	1,884.00	2/15/2024 14:31
Cement		165.0	1,717.00	1,810.00	2/15/2024 14:32
Fresh Water (Permanent)		165.0	100.00	1,717.00	2/16/2024 07:00
Steel Plate		406.0	7.10	7.20	2/19/2024 14:30
Glacier Tile		407.0	5.60	7.10	2/19/2024 14:31

Bill 30 Requirements (Head Count Only)

Type	Count
Day Shift	23



Daily ARO Operations

Well: MGM EAST MACKAY I-78

Pad: I-78-6450-12530

Business Unit: Strategic Investments

Rig:

Report Date: 2/7/2024

Report #: 8

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
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Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical
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KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00
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Contractor Hours (Head Count & Hours)			
Type	Count	Reg Work Time (hr)	

Flare Permit			
Contract # C05380 C	Agreement Start Date 7/25/2016	Agreement End Date	

Flaring Volumes				
Type	Subtype	Des	Amount	Units
		No Gas Flared		

Report Fluids Summary							
Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)
Water	26.50	0.00	-47.50	74.00	0.00	74.00	

Weather & Road Condition			
Weather	T (°C)	Road Cond	
Clear	-24	Fair	



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/8/2024
Report #: 9

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
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Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical
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KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00
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Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/31/2013	20.00	5.70	14.30	406.0				
Surface	2/10/2013	402.00	5.70	396.30	244.5				
Production	2/25/2013	1,988.00	5.70	1,982.30	177.8				
Liner	3/1/2013	1,964.97							

Zones / Event Sequence

Zone Name	Zone Code	Current Status
Canol	/00	
Blue Fish	/00	

Job Information / AFE

Objective
Well Abandonment. Program will commence after access and camp are prepared. No SCVF's have been reported or expected.

PROGRAM SUMMARY

Read & record SIP(s). MIRU Service Rig, P-tank and associated equipment

Investigate status of SCVF/GM.

Rig in wellhead service and lubricator. Pull Cameron back pressure valve.

MIRU slick line unit. Pull A-3 tubing plug from 21mcf. Pressure test tubing to 7000 Kpa with water prior to pulling plug. Pull PX plug and prong from X profile at 1349.5m KB. Tag and record PBTD depth with blind box. Perforate hole in tubing above the upper packer. Rig out slick line.

Bleed off pressure to test P-tank. Circulate well to 6% KCL water (if needed) and kill well. Remove wellhead and install BOP's.

Unset hydraulic packers and pull tubing out of the hole. Lay down any bad joints.

RIH bit and scraper for 177.8mm casing on 73mm tubing string to PBTD. Circulate clean. Pull bit and scraper.

Run in hole with 73mm tubing and tag PBTD. Pull off bottom for cement job.

Rig in cementers and balance a 200-meter cement plug. Pull above plug and circulate to fresh water. Apply squeeze pressure. Wait on cement overnight.

Tag cement plug and record depth (Minimum of 15 meters above top perforation required). Pressure test to 7000 Kpa for 10 minutes. Bleed off pressure and pull tubing.

RIH with permanent bridge plug for 177.8mm casing on 73mm tubing string. Set bridge plug within 15m of tagged cement top. Pressure test bridge plug to 7000 Kpa for 10 minutes. Rotate off plug and balance 1m3 cement plug on bridge plug. Backwash with fresh water.

Pull out of hole and lay down tubing string.

Cut and cap the casing strings with vented cap.

Costs do not include access, camp or any associated SEQR

Target Formation

Hume

Daily Pressures

Subtype	P (kPa)
SICP	0
SITP	0

Operation Summary

Operations Next Report Period

Pull and lay down 114.3 mm LT&C P-110 20.09 kg/m tubing string.

Operation at 6am

Boiler hand maintain heat on wellhead and tank farm

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00	7.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.
07:00	07:30	0.50	7.50	Safety Mtg	PP		Held day shift safety and operational meeting. Review contractor policies and procedures for travel, towing, slickline, electric line, explosive and injection operations. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.
07:30	08:30	1.00	8.50	WH / XT Ops	PP		Remove wireline 103 mm BOP and Flow tee. Remove 103 mm x 69 MPa Upper Dual Master Valve wellhead with 279.4 mm - 34.5 MPa x 103 mm - 69 MPa Adapter Flange.
08:30	09:30	1.00	9.50	PCKER	PP		Makeup Cameron Tubing Hanger Pull tool with 114.3 mm x 1.8 MPa Pup Joint onto tubing hanger. Pickup 114.3 mm tubing string. Movement at 17,000 daN. Pickup to 37000 daN. Unable to locate free point in Weatherford "LDS" Latch Assembly. Land tubing hanger.
09:30	11:00	1.50	11.00	BOPS	PP		Install 279.4 mm x 179.4 mm x 34.5 MPa Adapter Flange and Class III - 34.5 MPa BOP. Rig in work floor and tarp in wellhead.



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/8/2024
Report #: 9

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical	
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00	

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
11:00	12:00	1.00	12.00	BOPS	PP		Pressure test 34.5 MPa BOP wellhead connection and pipe rams to 1.4 MPa (low) and 30 MPa (high). Held each 10 minutes. Pressure test annular bag 1.4 MPa (low) and 10 MPa (high). Held each 10 minutes.
12:00	13:00	1.00	13.00	PCKER	PP		Pickup on 114 mm tubing string. Try working pipe up and down to try and free up Weatherford "LSA" Latch Seal. Try right rotation to release from liner. Torque up tubing string to 3500 ft lbs (max). Unable to release from Weatherford 177.8 mm x 114 mm "UltraPak HU" Upper Bore Hydraulic Set Double Grip Liner Top Packer
13:00	14:00	1.00	14.00	WOG	PP		Wait on operations.
14:00	14:30	0.50	14.50	Safety Mtg	PP		Held explosive safety and operational meeting. Review hazards and controls for perforating. Isolate communications on site and lease access.
14:30	17:00	2.50	17.00	PERF	PP		Rig in wireline flow tee and pressure control equipment on to 114 mm - 34.5 MPa Stab Valve. Makeup and run 92.2 mm Jet Cutter (part # CUT-3625-062NT). Correlate on depth to downhole diagram dated 3/1/2013. Tubing string weight 35,000 daN. Cut 114.3 mm x 20.09 kg/m P-110 tubing at 1812.0 mKB x 16:00 hrs. Pull out tool string and fired jet cutter. Rig down wireline flo tee, pressure control equipment and wire line unit.
17:00	18:15	1.25	18.25	PU/LD	PP		Pull and lay down 20 = Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m. Position tubing bottom 1572 mKB for night.
18:15	18:30	0.25	18.50	SDFN	PP		Winterize, clean and secure circulation lines, wellhead and tanks. Release rig crew for night.
18:30	19:00	0.50	19.00	Safety Mtg	PP		Held night shift safety and operational meeting. Review contractor policies and procedures for work alone and boiler hand to monitor temperature of water and equipment. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.
19:00	00:00	5.00	24.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night. End report for day.

6:00 Update

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00		PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.

Other In Hole

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement Retainer		159.4	1,810.00	1,810.30	2/12/2024 09:15
Cement		178.0	1,810.30	1,812.32	2/15/2024 14:30
Cement		96.0	1,812.30	1,884.00	2/15/2024 14:31
Cement		165.0	1,717.00	1,810.00	2/15/2024 14:32
Fresh Water (Permanent)		165.0	100.00	1,717.00	2/16/2024 07:00
Steel Plate		406.0	7.10	7.20	2/19/2024 14:30
Glacier Tile		407.0	5.60	7.10	2/19/2024 14:31

Bill 30 Requirements (Head Count Only)

Type	Count
Day Shift	23

Contractor Hours (Head Count & Hours)

Type	Count	Reg Work Time (hr)

Flare Permit

Contract # C05380 C	Agreement Start Date 7/25/2016	Agreement End Date
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Flaring Volumes

Type	Subtype	Des	Amount	Units
		No Gas Flared		

Report Fluids Summary

Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)
Water	26.50	0.00	-47.50	74.00	0.00	74.00	



Daily ARO Operations

Well: MGM EAST MACKAY I-78

Pad: I-78-6450-12530

Business Unit: Strategic Investments

Rig:

Report Date: 2/8/2024

Report #: 9

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078		
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical			
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00			
Weather & Road Condition							
Weather Clear	T (°C) -21	Road Cond Fair					



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/9/2024
Report #: 10

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
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Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical
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KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00
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Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/31/2013	20.00	5.70	14.30	406.0				
Surface	2/10/2013	402.00	5.70	396.30	244.5				
Production	2/25/2013	1,988.00	5.70	1,982.30	177.8				
Liner	3/1/2013	1,964.97							

Zones / Event Sequence

Zone Name	Zone Code	Current Status
Canol	/00	
Blue Fish	/00	

Job Information / AFE

Objective
Well Abandonment. Program will commence after access and camp are prepared. No SCVF's have been reported or expected.

PROGRAM SUMMARY

Read & record SIP(s). MIRU Service Rig, P-tank and associated equipment

Investigate status of SCVF/GM.

Rig in wellhead service and lubricator. Pull Cameron back pressure valve.

MIRU slick line unit. Pull A-3 tubing plug from 21mcf. Pressure test tubing to 7000 Kpa with water prior to pulling plug. Pull PX plug and prong from X profile at 1349.5m KB. Tag and record PBTD depth with blind box. Perforate hole in tubing above the upper packer. Rig out slick line.

Bleed off pressure to test P-tank. Circulate well to 6% KCL water (if needed) and kill well. Remove wellhead and install BOP's.

Unset hydraulic packers and pull tubing out of the hole. Lay down any bad joints.

RIH bit and scraper for 177.8mm casing on 73mm tubing string to PBTD. Circulate clean. Pull bit and scraper.

Run in hole with 73mm tubing and tag PBTD. Pull off bottom for cement job.

Rig in cementers and balance a 200-meter cement plug. Pull above plug and circulate to fresh water. Apply squeeze pressure. Wait on cement overnight.

Tag cement plug and record depth (Minimum of 15 meters above top perforation required). Pressure test to 7000 Kpa for 10 minutes. Bleed off pressure and pull tubing.

RIH with permanent bridge plug for 177.8mm casing on 73mm tubing string. Set bridge plug within 15m of tagged cement top. Pressure test bridge plug to 7000 Kpa for 10 minutes. Rotate off plug and balance 1m3 cement plug on bridge plug. Backwash with fresh water.

Pull out of hole and lay down tubing string.

Cut and cap the casing strings with vented cap.

Costs do not include access, camp or any associated SEQR

Target Formation

Hume

Daily Pressures

Subtype	P (kPa)
SICP	0
SITP	0

Operation Summary

Operations Next Report Period

Run in Tapered Tubing String. 114.3 mm LT&C P-110 20.09 kg/m, 73 mm EUE J-55 9.67 kg/m and 60.3 mm EUE J-55 6.99 kg/m. Position tubing bottom 1940 mKB.

Operation at 6am

Boiler hand maintain heat on wellhead and tank farm

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00	7.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.
07:00	07:30	0.50	7.50	Safety Mtg	PP		Held day shift safety and operational meeting. Review contractor policies and procedures for travel, towing, slickline, electric line, explosive and injection operations. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/9/2024
Report #: 10

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical	
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00	

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
07:30	15:00	7.50	15.00	PU/LD	PP		Pull and lay down (129) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m and (1) Cut Joint Tubing 114.3 mm x 10.85 m LT&C P-110 20.09 kg/m. Rig down 114.3 mm tubing handling equipment. **NOTE** Receive new direction from Calgary for cementing operations. Release Reliance Wire Line, Cameron Wellhead, Cascade Hot Oiler. Cascade (dirty) truck and vac unit start travel to site from GP. Charger cementing units start travel from GP. Charger pump unit have transmission issue in Enterprise. Unable to get to site till 11-Feb-2024.
15:00	17:45	2.75	17.75	TIH	PP		Rig in 60.3 mm tubing handling equipment. Run (15) Joints Tubing 60.3 mm x 140.38 m J-55 6.99 kg/m. Rig down 60.3 mm tubing handling equipment. Rig in 73 mm tubing handling equipment. Run (4) Joints Tubing 73 mm x 36.88 m J-55 9.67 kg/m with Slim Hole Couplers. Rig down 73 mm tubing handling equipment. Rig in 114.3 mm LT&C Tubing handling equipment. Run (15) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m. Position tubing bottom 357 mKB for night.
17:45	18:30	0.75	18.50	SDFN	PP		Winterize, lines, pump and wellhead. SDFN rig crew.
18:30	19:00	0.50	19.00	Safety Mtg	PP		Held night shift safety and operational meeting. Review contractor policies and procedures for work alone and boiler hand to monitor temperature of water and equipment. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.
19:00	00:00	5.00	24.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night. End report for day.

6:00 Update

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00		PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.

Partial BHA / Work String In Hole

Run Date 2/9/2024	Set Depth (mKB) 1,964.97	String Description Liner
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Partial BHA / Work String Components

Item Des	Icon	Jts	Len (m)	OD (mm)	Com
Liner		1	1.15	114.3	Jet Cut Casing Joint
Profile Nipple	R	1	0.40	114.3	LT&C Box x Pin Connections
Liner Pup Joint		1	3.07	114.3	
Seal Assembly		1	2.17	114.3	
Liner Hanger Packer		1	2.16	177.8	
Liner		1	12.09	114.3	
Profile Nipple	R	1	0.40	114.3	LT&C Box x Pin Connections – Gauges to be Hung off Lock after Frac
Liner		1	12.00	114.3	
Frac Sleeve		1	1.23	114.3	86.49mm Ball Seat ID and Requires a 89.03mm Ball
Liner Pup Joint		3	8.00	114.3	
Open Hole Packer		1	3.57	114.3	
Liner		1	12.10	114.3	
Frac Sleeve		1	1.23	114.3	83.31mm Ball Seat ID and Requires a 85.85mm Ball
Liner Pup Joint		1	1.86	114.3	
Open Hole Packer		1	3.58	114.3	
Liner Pup Joint		1	6.14	114.3	
Frac Sleeve		1	1.23	114.3	80.14mm Ball Seat ID and Requires a 82.68mm Ball
Liner Pup Joint		1	8.00	114.3	
Open Hole Packer		1	3.64	114.3	
Liner		1	36.29	114.3	
Open Hole Packer		1	3.63	114.3	



Daily ARO Operations

Well: MGM EAST MACKAY I-78
 Pad: I-78-6450-12530
 Business Unit: Strategic Investments
 Rig:

Report Date: 2/9/2024
 Report #: 10

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical	
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00	

Partial BHA / Work String Components

Item Des	Icon	Jts	Len (m)	OD (mm)	Com
Anchor Assembly		1	3.87	177.8	
Crossover - Pin x Box		1	0.27	114.3	(Supplied by Weatherford)
Liner Pup Joint		1	3.07	114.3	
Profile Nipple		1	0.53	114.3	Gauges to be Hung off Lock
Liner Pup Joint		1	3.07	114.3	
Toe Sleeve		1	1.06	114.3	
Toe Sleeve		1	1.06	114.3	
Liner Pup Joint		1	3.07	88.9	
Liner Pup Joint		1	3.07	88.9	
Landing Collar		1	0.24	114.7	
Liner Pup Joint		1	3.05	88.9	
Float Collar		1	0.25	114.3	
Liner Pup Joint		1	3.05	88.9	
Float Shoe		1	3.05	114.3	

Other In Hole

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement Retainer		159.4	1,810.00	1,810.30	2/12/2024 09:15
Cement		178.0	1,810.30	1,812.32	2/15/2024 14:30
Cement		96.0	1,812.30	1,884.00	2/15/2024 14:31
Cement		165.0	1,717.00	1,810.00	2/15/2024 14:32
Fresh Water (Permanent)		165.0	100.00	1,717.00	2/16/2024 07:00
Steel Plate		406.0	7.10	7.20	2/19/2024 14:30
Glacier Tile		407.0	5.60	7.10	2/19/2024 14:31

Bill 30 Requirements (Head Count Only)

Type	Count
Day Shift	22

Contractor Hours (Head Count & Hours)

Type	Count	Reg Work Time (hr)

Flare Permit

Contract # C05380 C	Agreement Start Date 7/25/2016	Agreement End Date
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Flaring Volumes

Type	Subtype	Des	Amount	Units
		No Gas Flared		

Report Fluids Summary

Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)
Water	26.50	0.00	-55.95	82.45	0.00	82.45	

Weather & Road Condition

Weather	T (°C)	Road Cond
Clear	-19	Fair



Daily ARO Operations

Well: MGM EAST MACKAY I-78

Pad: I-78-6450-12530

Business Unit: Strategic Investments

Rig:

Report Date: 2/10/2024

Report #: 11

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
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Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical
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KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00
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Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/31/2013	20.00	5.70	14.30	406.0				
Surface	2/10/2013	402.00	5.70	396.30	244.5				
Production	2/25/2013	1,988.00	5.70	1,982.30	177.8				
Liner	3/1/2013	1,964.97							

Zones / Event Sequence

Zone Name	Zone Code	Current Status
Canol	/00	
Blue Fish	/00	

Job Information / AFE

Objective
Well Abandonment. Program will commence after access and camp are prepared. No SCVF's have been reported or expected.

PROGRAM SUMMARY

Read & record SIP(s). MIRU Service Rig, P-tank and associated equipment

Investigate status of SCVF/GM.

Rig in wellhead service and lubricator. Pull Cameron back pressure valve.

MIRU slick line unit. Pull A-3 tubing plug from 21mcf. Pressure test tubing to 7000 Kpa with water prior to pulling plug. Pull PX plug and prong from X profile at 1349.5m KB. Tag and record PBTD depth with blind box. Perforate hole in tubing above the upper packer. Rig out slick line.

Bleed off pressure to test P-tank. Circulate well to 6% KCL water (if needed) and kill well. Remove wellhead and install BOP's.

Unset hydraulic packers and pull tubing out of the hole. Lay down any bad joints.

RIH bit and scraper for 177.8mm casing on 73mm tubing string to PBTD. Circulate clean. Pull bit and scraper.

Run in hole with 73mm tubing and tag PBTD. Pull off bottom for cement job.

Rig in cementers and balance a 200-meter cement plug. Pull above plug and circulate to fresh water. Apply squeeze pressure. Wait on cement overnight.

Tag cement plug and record depth (Minimum of 15 meters above top perforation required). Pressure test to 7000 Kpa for 10 minutes. Bleed off pressure and pull tubing.

RIH with permanent bridge plug for 177.8mm casing on 73mm tubing string. Set bridge plug within 15m of tagged cement top. Pressure test bridge plug to 7000 Kpa for 10 minutes. Rotate off plug and balance 1m3 cement plug on bridge plug. Backwash with fresh water.

Pull out of hole and lay down tubing string.

Cut and cap the casing strings with vented cap.

Costs do not include access, camp or any associated SEQR

Target Formation Hume

Daily Pressures	Subtype	P (kPa)
SICP		0
SITP		0

Operation Summary

Operations Next Report Period

Pull Tapered Tubing String. 114.3 mm LT&C P-110 20.09 kg/m, 73 mm EUJ J-55 9.67 kg/m and 60.3 mm EUJ J-55 6.99 kg/m.

Operation at 6am

Boiler hand maintain heat on wellhead and tank farm

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00	7.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.
07:00	07:30	0.50	7.50	Safety Mtg	PP		Held day shift safety and operational meeting. Review contractor policies and procedures for travel, towing, slickline, electric line, explosive and injection operations. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.
07:30	15:00	7.50	15.00	RIHPOOH	PP		Run (121) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m.



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/10/2024
Report #: 11

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical	
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00	

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
15:00	17:30	2.50	17.50	RIHPOOH	PP		<p>Tag top of Jet Cut 114.3 LT&C P-110 20.09 kg/m tubing at 1812.0 mKB. Try rotation and working tapered 114 mm x 73 mm x 60.3 mm tubing string into Jet Cut 114 mm Tubing. Weight on cut lip range from 500 daN to 5000 daN. Still unable to work into Jet Cut 114.3 mm Tubing.</p> <p>Rig in circulation lines. Pump 6.4 m³ fresh (non-saline) water to break forward circulation at 5 MPa x 700 L/minute. Work taper tubing string up and down while pumping but unable to get into Jet Cut 114 mm Tubing 1812 mKB.</p> <p>Tubing bottom 1812 mKB. Close returns from annulus. Pressure up tubing and casing to 12.0 MPa. Establish feed rate 75 L/minute for 10 minutes x 750 liters fresh (non saline) water. Try to slide tubing string into 114.3 mm Jet Cut Tubing 1812 mKB while injecting at 12.0 MPa x 75 L/min. Unable to slide into Jet Cut 114.3 mm Tubing.</p> <p>Stop pump and monitor pressure. 1 minute SICP 8900 KPa. 2 minute SICP 6800 KPa. 3 minute SICP 5075 KPa. 4 minute SICP 3920 KPa. 5 minute SICP 2975 KPa.</p> <p>Pull and lay down (5) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m. Position tubing bottom 1758 mKB for night.</p> <ul style="list-style-type: none"> - Winterize, lines, pump and wellhead. SDFN rig crew. - Boiler hand maintain heat on wellhead, tank farm and equipment for night. - End report for day.
17:30	18:00	0.50	18.00	PU/LD	PP		Pull and lay down (5) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m. Position tubing bottom 1758 mKB for night.
18:00	18:30	0.50	18.50	SDFN	PP		<p>Winterize, lines, pump and wellhead.</p> <p>SDFN rig crew.</p>
18:30	19:00	0.50	19.00	Safety Mtg	PP		Held night shift safety and operational meeting. Review contractor policies and procedures for work alone and boiler hand to monitor temperature of water and equipment. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.
19:00	00:00	5.00	24.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night. End report for day.

6:00 Update

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00		PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.

Other In Hole

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement Retainer		159.4	1,810.00	1,810.30	2/12/2024 09:15
Cement		178.0	1,810.30	1,812.32	2/15/2024 14:30
Cement		96.0	1,812.30	1,884.00	2/15/2024 14:31
Cement		165.0	1,717.00	1,810.00	2/15/2024 14:32
Fresh Water (Permanent)		165.0	100.00	1,717.00	2/16/2024 07:00
Steel Plate		406.0	7.10	7.20	2/19/2024 14:30
Glacier Tile		407.0	5.60	7.10	2/19/2024 14:31

Bill 30 Requirements (Head Count Only)

Type	Count
Day Shift	21

Contractor Hours (Head Count & Hours)

Type	Count	Reg Work Time (hr)

Flare Permit

Contract # C05380 C	Agreement Start Date 7/25/2016	Agreement End Date
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Flaring Volumes

Type	Subtype	Des	Amount	Units
		No Gas Flared		

Report Fluids Summary

Fluid	Cum to Lease (m ³)	Cum fm lease (m ³)	Lease Bal (m ³)	Cum to Well (m ³)	Cum from Well (m ³)	Left to recover (m ³)	Cum Non-recov (m ³)
Water	26.50	0.00	-55.95	82.45	0.00	82.45	



Daily ARO Operations

Well: MGM EAST MACKAY I-78

Pad: I-78-6450-12530

Business Unit: Strategic Investments

Rig:

Report Date: 2/10/2024

Report #: 11

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078		
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical			
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00			
Weather & Road Condition							
Weather Clear	T (°C) -18	Road Cond Fair					



Daily ARO Operations

Well: MGM EAST MACKAY I-78

Pad: I-78-6450-12530

Business Unit: Strategic Investments

Rig:

Report Date: 2/11/2024

Report #: 12

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
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Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical
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KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00
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Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/31/2013	20.00	5.70	14.30	406.0				
Surface	2/10/2013	402.00	5.70	396.30	244.5				
Production	2/25/2013	1,988.00	5.70	1,982.30	177.8				
Liner	3/1/2013	1,964.97							

Zones / Event Sequence

Zone Name	Zone Code	Current Status
Canol	/00	
Blue Fish	/00	

Job Information / AFE

Objective
Well Abandonment. Program will commence after access and camp are prepared. No SCVF's have been reported or expected.

PROGRAM SUMMARY

Read & record SIP(s). MIRU Service Rig, P-tank and associated equipment

Investigate status of SCVF/GM.

Rig in wellhead service and lubricator. Pull Cameron back pressure valve.

MIRU slick line unit. Pull A-3 tubing plug from 21mcf. Pressure test tubing to 7000 Kpa with water prior to pulling plug. Pull PX plug and prong from X profile at 1349.5m KB. Tag and record PBTD depth with blind box. Perforate hole in tubing above the upper packer. Rig out slick line.

Bleed off pressure to test P-tank. Circulate well to 6% KCL water (if needed) and kill well. Remove wellhead and install BOP's.

Unset hydraulic packers and pull tubing out of the hole. Lay down any bad joints.

RIH bit and scraper for 177.8mm casing on 73mm tubing string to PBTD. Circulate clean. Pull bit and scraper.

Run in hole with 73mm tubing and tag PBTD. Pull off bottom for cement job.

Rig in cementers and balance a 200-meter cement plug. Pull above plug and circulate to fresh water. Apply squeeze pressure. Wait on cement overnight.

Tag cement plug and record depth (Minimum of 15 meters above top perforation required). Pressure test to 7000 Kpa for 10 minutes. Bleed off pressure and pull tubing.

RIH with permanent bridge plug for 177.8mm casing on 73mm tubing string. Set bridge plug within 15m of tagged cement top. Pressure test bridge plug to 7000 Kpa for 10 minutes. Rotate off plug and balance 1m3 cement plug on bridge plug. Backwash with fresh water.

Pull out of hole and lay down tubing string.

Cut and cap the casing strings with vented cap.

Costs do not include access, camp or any associated SEQR

Target Formation Hume

Daily Pressures	Subtype	P (kPa)
SICP		0
SITP		0

Operation Summary

Operations Next Report Period
Eline set 178 Weatherford 10K Cement Retainer 1811 mKB. Run Taper 114 mm and 73 mm Tubing String with Weatherford Retainer Stinger. Charger Cementing travel to Wrigley NWT.

Operation at 6am

Boiler hand maintain heat on wellhead and tank farm

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00	7.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.
07:00	07:30	0.50	7.50	Safety Mtg	PP		Held day shift safety and operational meeting. Review contractor policies and procedures for travel, towing, trip pipe and injection operations. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/11/2024
Report #: 12

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical	
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00	

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
07:30	15:00	7.50	15.00	PU/LD	PP		Pull and lay down (131) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m, Rig odwn 114 mm tubing handling equipment. Rig in 73 mm tubing handling equipment. Pull and lay down (4) Joints Tubing 73 mm x 36.88 m J-55 9.67 kg/m with Slim Hole Couplers. Rig down 73 mm tubing handling equipment. Rig in 60.3 mm tubing handling equipment. Pull and lay down (15) Joints Tubing 60.3 mm x 140.38 m J-55 6.99 kg/m. Rig down 60.3 mm tubing handling equipment. **NOTE** End of 60.3 mm tubing shows heavy wear from trying to get into the 114 mm Cut Tubing at 1812 mKB.
15:00	18:30	3.50	18.50	RU/RD	PP		Cascade haul 27.5 m ³ emulsion to Secure High Level 01-14-73-17W5. Cascade hot oiler finish travel to GP. Cascade vac unit on standby in camp. Weatherford tool hand finish travel to GP. Reliance Wire Line travel from Ft Simpson and spot on site. Perform general maintenance on rig and rental equipment. Winterize, lines, pump and wellhead. SDFN rig crew.
18:30	19:00	0.50	19.00	Safety Mtg	PP		Held night shift safety and operational meeting. Review contractor policies and procedures for work alone and boiler hand to monitor temperature of water and equipment. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.
19:00	00:00	5.00	24.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night. End report for day.

6:00 Update

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00		PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.

Other In Hole

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement Retainer		159.4	1,810.00	1,810.30	2/12/2024 09:15
Cement		178.0	1,810.30	1,812.32	2/15/2024 14:30
Cement		96.0	1,812.30	1,884.00	2/15/2024 14:31
Cement		165.0	1,717.00	1,810.00	2/15/2024 14:32
Fresh Water (Permanent)		165.0	100.00	1,717.00	2/16/2024 07:00
Steel Plate		406.0	7.10	7.20	2/19/2024 14:30
Glacier Tile		407.0	5.60	7.10	2/19/2024 14:31

Bill 30 Requirements (Head Count Only)

Type	Count
Day Shift	20

Contractor Hours (Head Count & Hours)

Type	Count	Reg Work Time (hr)

Flare Permit

Contract # C05380 C	Agreement Start Date 7/25/2016	Agreement End Date
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Flaring Volumes

Type	Subtype	Des	Amount	Units
		No Gas Flared		

Report Fluids Summary

Fluid	Cum to Lease (m ³)	Cum fm lease (m ³)	Lease Bal (m ³)	Cum to Well (m ³)	Cum from Well (m ³)	Left to recover (m ³)	Cum Non-recov (m ³)
Oil	0.00	27.50	-27.50				
Water	26.50	0.00	-56.95	83.45	0.00	83.45	



Daily ARO Operations

Well: MGM EAST MACKAY I-78

Pad: I-78-6450-12530

Business Unit: Strategic Investments

Rig:

Report Date: 2/11/2024

Report #: 12

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078		
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical			
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00			
Weather & Road Condition							
Weather Partly Cloudy	T (°C) -15	Road Cond Fair					



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/12/2024
Report #: 13

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078				
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical					
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00						
Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)				
Conductor	1/31/2013	20.00	5.70	14.30	406.0				
Surface	2/10/2013	402.00	5.70	396.30	244.5				
Production	2/25/2013	1,988.00	5.70	1,982.30	177.8				
Liner	3/1/2013	1,964.97							
Zones / Event Sequence									
Zone Name		Zone Code		Current Status					
Canol	/00								
Blue Fish	/00								
Job Information / AFE									
Objective	Well Abandonment. Program will commence after access and camp are prepared. No SCVF's have been reported or expected.								
PROGRAM SUMMARY	Read & record SIP(s). MIRU Service Rig, P-tank and associated equipment								
Investigate status of SCVF/GM.	Rig in wellhead service and lubricator. Pull Cameron back pressure valve.								
MIRU slick line unit. Pull A-3 tubing plug from 21mcf. Pressure test tubing to 7000 Kpa with water prior to pulling plug. Pull PX plug and prong from X profile at 1349.5m KB. Tag and record PBTD depth with blind box. Perforate hole in tubing above the upper packer. Rig out slick line.									
Bleed off pressure to test P-tank. Circulate well to 6% KCL water (if needed) and kill well. Remove wellhead and install BOP's.									
Unset hydraulic packers and pull tubing out of the hole. Lay down any bad joints.									
RIH bit and scraper for 177.8mm casing on 73mm tubing string to PBTD. Circulate clean. Pull bit and scraper.									
Run in hole with 73mm tubing and tag PBTD. Pull off bottom for cement job.									
Rig in cementers and balance a 200-meter cement plug. Pull above plug and circulate to fresh water. Apply squeeze pressure. Wait on cement overnight.									
Tag cement plug and record depth (Minimum of 15 meters above top perforation required). Pressure test to 7000 Kpa for 10 minutes. Bleed off pressure and pull tubing.									
RIH with permanent bridge plug for 177.8mm casing on 73mm tubing string. Set bridge plug within 15m of tagged cement top. Pressure test bridge plug to 7000 Kpa for 10 minutes. Rotate off plug and balance 1m3 cement plug on bridge plug. Backwash with fresh water.									
Pull out of hole and lay down tubing string.									
Cut and cap the casing strings with vented cap.									
Costs do not include access, camp or any associated SEQR									
Target Formation Hume									
Daily Pressures									
Subtype			P (kPa)						
SICP			0						
SITP			0						
Operation Summary									
Operations Next Report Period									
Space out tubing string. Perform injection test. Wait on cement crew.									
Operation at 6am									
Boiler hand maintain heat on tank farm and wellhead									
24 Hr Operational Comments									
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details		
00:00	07:00	7.00	7.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.		
07:00	07:30	0.50	7.50	Safety Mtg	PP		Held day shift safety and operational meeting. Review contractor policies and procedures for travel, towing, slickline, electric line, explosive and injection operations. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.		
07:30	10:30	3.00	10.50	ELECL	PP		Rig in wire line adapter flange and flow tee on top of 179 mm - 34.5 MPa BOP. Secure communications on site and access to site.		
							Run CCL / 178 mm Weatherford 10K Cement Retainer. Correlate to down hole diagram dated 3/01/2013. Fluid level 255 mKB. Set Weatherford Cement Retainer 1810 mKB x 09:15 hrs. Pull CCL / Setting Tool.		
							Rig down wire line unit and travel to MGM KM16 Base.		
							NOTE 178.4 mm Casing Collars at 1811.50 mKB and 1797.2 mKB		



Daily ARO Operations

Well: MGM EAST MACKAY I-78
 Pad: I-78-6450-12530
 Business Unit: Strategic Investments
 Rig:

Report Date: 2/12/2024
 Report #: 13

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical	
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00	

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
10:30	17:00	6.50	17.00	RIHPOOH	PP		Run in Taper Tubing String as: (1) Weatherford Cement Retainer Stinger 0.7 m (1) Centralizer 143 mm x 73 mm x 0.28 m (2) Joints Tubing 73 mm x 19.02 m J-55 9.67 kg/m (1) Pup Joint 73 mm x 3.08 m J-55 9.67 kg/m (1) Pup Joint 73 mm x 1.24 m J-55 9.67 kg/m (1) cross over Sub 73 mm x 88.9 mm x 114.3 mm x 0.42 m (148) Joints Tubing 114.3 mm x 1785.15 m LT&C P-110 20.09 kg/m.
17:00	18:00	1.00	18.00	PRESS	PP		Position tubing bottom 1800 mKB. Pump 1.0 m ³ fresh (non-saline) water to fill and pressure test 178 mm casing, taper 114 mm / 73 mm tubing string and Weatherford 178 mm - 10K Cement Retainer at 1810 mKB to 10.0 MPa. Held 10 minutes. No leak off. No signs bubbles from Surface Casing Vent. Lower Taper 114 mm / 73 mm Tubing string and sting into Weatherford 178 mm Cement Retainer at 1810 mKB. Set 5000 daN weight on Cement Retainer. Pressure test 178 mm Casing, Taper 114 mm / 73 mm Tubing and Cement retainer Seal to 10 MPa. Held 10 minutes. Bleed off pressure.
18:00	18:15	0.25	18.25	POOH	PP		Pull and lay down (5) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m. Position tubing bottom 1751 mKB.
18:15	18:30	0.25	18.50	SDFN	PP		Winterize, lines, pump and wellhead. SDFN rig crew.
18:30	19:00	0.50	19.00	Safety Mtg	PP		Held night shift safety and operational meeting. Review contractor policies and procedures for work alone and boiler hand to monitor temperature of water and equipment. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.
19:00	00:00	5.00	24.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night. End report for day.

6:00 Update

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00		PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.

Other In Hole

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement Retainer		159.4	1,810.00	1,810.30	2/12/2024 09:15
Cement		178.0	1,810.30	1,812.32	2/15/2024 14:30
Cement		96.0	1,812.30	1,884.00	2/15/2024 14:31
Cement		165.0	1,717.00	1,810.00	2/15/2024 14:32
Fresh Water (Permanent)		165.0	100.00	1,717.00	2/16/2024 07:00
Steel Plate		406.0	7.10	7.20	2/19/2024 14:30
Glacier Tile		407.0	5.60	7.10	2/19/2024 14:31

Bill 30 Requirements (Head Count Only)

Type	Count
Day Shift	19

Contractor Hours (Head Count & Hours)

Type	Count	Reg Work Time (hr)

Flare Permit

Contract # C05380 C	Agreement Start Date 7/25/2016	Agreement End Date
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Flaring Volumes

Type	Subtype	Des	Amount	Units
		No Gas Flared		

Report Fluids Summary

Fluid	Cum to Lease (m ³)	Cum fm lease (m ³)	Lease Bal (m ³)	Cum to Well (m ³)	Cum from Well (m ³)	Left to recover (m ³)	Cum Non-recov (m ³)
Oil	0.00	27.50	-27.50				
Water	26.50	0.00	-56.95	83.45	0.00	83.45	



Daily ARO Operations

Well: MGM EAST MACKAY I-78

Pad: I-78-6450-12530

Business Unit: Strategic Investments

Rig:

Report Date: 2/12/2024

Report #: 13

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078		
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical			
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00				
Weather & Road Condition							
Weather Partly Cloudy	T (°C) -18	Road Cond Fair					



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/13/2024
Report #: 14

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078				
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical					
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00					
Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/31/2013	20.00	5.70	14.30	406.0				
Surface	2/10/2013	402.00	5.70	396.30	244.5				
Production	2/25/2013	1,988.00	5.70	1,982.30	177.8				
Liner	3/1/2013	1,964.97							
Zones / Event Sequence									
Zone Name	Zone Code	Current Status							
Canol	/00								
Blue Fish	/00								
Job Information / AFE									
Objective	Well Abandonment. Program will commence after access and camp are prepared. No SCVF's have been reported or expected.								
PROGRAM SUMMARY									
Read & record SIP(s). MIRU Service Rig, P-tank and associated equipment									
Investigate status of SCVF/GM.									
Rig in wellhead service and lubricator. Pull Cameron back pressure valve.									
MIRU slick line unit. Pull A-3 tubing plug from 21mcf. Pressure test tubing to 7000 Kpa with water prior to pulling plug. Pull PX plug and prong from X profile at 1349.5m KB. Tag and record PBTD depth with blind box. Perforate hole in tubing above the upper packer. Rig out slick line.									
Bleed off pressure to test P-tank. Circulate well to 6% KCL water (if needed) and kill well. Remove wellhead and install BOP's.									
Unset hydraulic packers and pull tubing out of the hole. Lay down any bad joints.									
RIH bit and scraper for 177.8mm casing on 73mm tubing string to PBTD. Circulate clean. Pull bit and scraper.									
Run in hole with 73mm tubing and tag PBTD. Pull off bottom for cement job.									
Rig in cementers and balance a 200-meter cement plug. Pull above plug and circulate to fresh water. Apply squeeze pressure. Wait on cement overnight.									
Tag cement plug and record depth (Minimum of 15 meters above top perforation required). Pressure test to 7000 Kpa for 10 minutes. Bleed off pressure and pull tubing.									
RIH with permanent bridge plug for 177.8mm casing on 73mm tubing string. Set bridge plug within 15m of tagged cement top. Pressure test bridge plug to 7000 Kpa for 10 minutes. Rotate off plug and balance 1m3 cement plug on bridge plug. Backwash with fresh water.									
Pull out of hole and lay down tubing string.									
Cut and cap the casing strings with vented cap.									
Costs do not include access, camp or any associated SEQR									
Target Formation Hume									
Daily Pressures									
Subtype	SICP	SITP				P (kPa)			
						0			
						0			
Operation Summary									
Operations Next Report Period									
Wait on cement units.									
Operation at 6am									
Boiler hand maintain heat on wellhead and tank farm									
24 Hr Operational Comments									
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details		
00:00	07:00	7.00	7.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.		
07:00	07:30	0.50	7.50	Safety Mtg	PP		Held day shift safety and operational meeting. Review contractor policies and procedures for travel, towing, and trip pipe operations. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.		



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/13/2024
Report #: 14

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical	
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00	

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
07:30	18:30	11.00	18.50	WOO	PP		Cement contractor travel Hay River to Ft Simpson. Operations waiting on cementing contractor. OROGO inspect site, equipment and abandonment documentation. Held BOP drill. Review crew response and responsibilities. Function test 34.5 MPa BOP. System working within specifications. Winterize, lines, pump and wellhead. SDFN rig crew.
18:30	19:00	0.50	19.00	Safety Mtg	PP		Held night shift safety and operational meeting. Review contractor policies and procedures for work alone and boiler hand to monitor temperature of water and equipment. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.
19:00	00:00	5.00	24.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night. End report for day.

6:00 Update

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00		PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.

Other In Hole

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement		178.0	1,810.30	1,812.32	2/15/2024 14:30
Cement		96.0	1,812.30	1,884.00	2/15/2024 14:31
Cement		165.0	1,717.00	1,810.00	2/15/2024 14:32
Fresh Water (Permanent)		165.0	100.00	1,717.00	2/16/2024 07:00
Steel Plate		406.0	7.10	7.20	2/19/2024 14:30
Glacier Tile		407.0	5.60	7.10	2/19/2024 14:31

Bill 30 Requirements (Head Count Only)

Type	Count
Day Shift	17

Contractor Hours (Head Count & Hours)

Type	Count	Reg Work Time (hr)

Flare Permit

Contract # C05380 C	Agreement Start Date 7/25/2016	Agreement End Date
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Flaring Volumes

Type	Subtype	Des	Amount	Units
		No Gas Flared		

Report Fluids Summary

Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)
Oil	0.00	27.50	-27.50				
Water	26.50	0.00	-56.95	83.45	0.00	83.45	

Weather & Road Condition

Weather	T (°C)	Road Cond
Partly Cloudy	-27	Fair



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/14/2024
Report #: 15

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078				
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical					
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00					
Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/31/2013	20.00	5.70	14.30	406.0				
Surface	2/10/2013	402.00	5.70	396.30	244.5				
Production	2/25/2013	1,988.00	5.70	1,982.30	177.8				
Liner	3/1/2013	1,964.97							
Zones / Event Sequence									
Zone Name	Zone Code			Current Status					
Canol	/00								
Blue Fish	/00								
Job Information / AFE									
Objective	Well Abandonment. Program will commence after access and camp are prepared. No SCVF's have been reported or expected.								
PROGRAM SUMMARY	Read & record SIP(s). MIRU Service Rig, P-tank and associated equipment								
Investigate status of SCVF/GM.									
Rig in wellhead service and lubricator. Pull Cameron back pressure valve.									
MIRU slick line unit. Pull A-3 tubing plug from 21mcf. Pressure test tubing to 7000 Kpa with water prior to pulling plug. Pull PX plug and prong from X profile at 1349.5m KB. Tag and record PBTD depth with blind box. Perforate hole in tubing above the upper packer. Rig out slick line.									
Bleed off pressure to test P-tank. Circulate well to 6% KCL water (if needed) and kill well. Remove wellhead and install BOP's.									
Unset hydraulic packers and pull tubing out of the hole. Lay down any bad joints.									
RIH bit and scraper for 177.8mm casing on 73mm tubing string to PBTD. Circulate clean. Pull bit and scraper.									
Run in hole with 73mm tubing and tag PBTD. Pull off bottom for cement job.									
Rig in cementers and balance a 200-meter cement plug. Pull above plug and circulate to fresh water. Apply squeeze pressure. Wait on cement overnight.									
Tag cement plug and record depth (Minimum of 15 meters above top perforation required). Pressure test to 7000 Kpa for 10 minutes. Bleed off pressure and pull tubing.									
RIH with permanent bridge plug for 177.8mm casing on 73mm tubing string. Set bridge plug within 15m of tagged cement top. Pressure test bridge plug to 7000 Kpa for 10 minutes. Rotate off plug and balance 1m3 cement plug on bridge plug. Backwash with fresh water.									
Pull out of hole and lay down tubing string.									
Cut and cap the casing strings with vented cap.									
Costs do not include access, camp or any associated SEQR									
Target Formation Hume									
Daily Pressures									
Subtype	P (kPa)								
SICP	0								
SITP	0								
Operation Summary									
Operations Next Report Period									
Perform cementing operations as per abandonment program									
Operation at 6am									
Boiler hand maintain heat on wellhead and tank farm									
24 Hr Operational Comments									
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details		
00:00	07:00	7.00	7.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.		
07:00	07:30	0.50	7.50	Safety Mtg	PP		Held day shift safety and operational meeting. Review contractor policies and procedures for travel, towing, and trip pipe operations. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.		
07:30	08:30	1.00	8.50	RIHPOOH	PP		Run in (4) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m, (2) Pup Joints 114.3 mm x 1.24 m LT&C P-110 20.09 kg/m and (2) Pup Joints 114.3 mm x 1.24 m LT&C P-110 20.09 kg/m.		
08:30	09:30	1.00	9.50	Circulating	PP		Position tubing bottom 1809 mKB. Rig in circulation lines. Pump 1.0 m ³ fresh (non-saline) water to break forward circulation 500 L/min x 3.1 MPa.		



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/14/2024
Report #: 15

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical	
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00	

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
09:30	15:30	6.00	15.50	INJECT	PP		Lower Taper 114 mm / 73 mm Tubing String and sting into Weatherford 178 mm Cement Retainer at 1810 mKB. Set 5000 daN weight on retainer.
							Injection Rate # 1: 75 L/min x 2.5 m ³ fresh (non-saline) water in 40 minutes. Pressure climb to 19.0 MPa. Stop. pressure drop to 6 MPa in 5 minutes.
							Injection Rate # 2: 75 L/min x 1.12 m ³ fresh (non-saline) water in 15 minutes. Pressure start 6 MPa. Pressure climb to 20.0 MPa. Stop. pressure drop to 9 MPa in 10 minutes.
							Injection Rate # 3: 75 L/min x 0.225 m ³ fresh (non-saline) water in 3 minutes. Pressure start 9 MPa. Pressure climb to 20.0 MPa. Stop. pressure drop to 14.5 MPa in 5 minutes.
							Bleed down well pressure. Pull up Tubing String and sting out of Weatherford 10K Cement Retainer. Position tubing string bottom 1808 mKB.
15:30	16:30	1.00	16.50	Slip/Cut DL	PP		Perform 5 m slip n cut of drill line.
16:30	18:30	2.00	18.50	SDFN	PP		Enviromental and Climate Change field inspection team travel and inspect site.
							Winterize, lines, pump and wellhead.
							SDFN rig crew.
							Charger Cementing travel to MGM Km #16 camp.
18:30	19:00	0.50	19.00	Safety Mtg	PP		Held night shift safety and operational meeting. Review contractor policies and procedures for work alone and boiler hand to monitor temperature of water and equipment. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.
19:00	00:00	5.00	24.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.
							End report for day.

6:00 Update

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00		PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.

Other In Hole

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement		178.0	1,810.30	1,812.32	2/15/2024 14:30
Cement		96.0	1,812.30	1,884.00	2/15/2024 14:31
Cement		165.0	1,717.00	1,810.00	2/15/2024 14:32
Fresh Water (Permanent)		165.0	100.00	1,717.00	2/16/2024 07:00
Steel Plate		406.0	7.10	7.20	2/19/2024 14:30
Glacier Tile		407.0	5.60	7.10	2/19/2024 14:31

Bill 30 Requirements (Head Count Only)

Type	Count
Day Shift	20

Contractor Hours (Head Count & Hours)

Type	Count	Reg Work Time (hr)

Flare Permit

Contract # C05380 C	Agreement Start Date 7/25/2016	Agreement End Date
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Flaring Volumes

Type	Subtype	Des	Amount	Units
		No Gas Flared		

Report Fluids Summary

Fluid	Cum to Lease (m ³)	Cum fm lease (m ³)	Lease Bal (m ³)	Cum to Well (m ³)	Cum from Well (m ³)	Left to recover (m ³)	Cum Non-recov (m ³)
Oil	0.00	27.50	-27.50				
Water	26.50	0.00	-60.75	87.25	0.00	87.25	



Daily ARO Operations

Well: MGM EAST MACKAY I-78

Pad: I-78-6450-12530

Business Unit: Strategic Investments

Rig:

Report Date: 2/14/2024

Report #: 15

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical	
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00		
Weather & Road Condition					
Weather Partly Cloudy		T (°C) -22		Road Cond Fair	



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/15/2024
Report #: 16

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
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Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical
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KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00
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Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/31/2013	20.00	5.70	14.30	406.0				
Surface	2/10/2013	402.00	5.70	396.30	244.5				
Production	2/25/2013	1,988.00	5.70	1,982.30	177.8				
Liner	3/1/2013	1,964.97							

Zones / Event Sequence

Zone Name	Zone Code	Current Status
Canol	/00	
Blue Fish	/00	

Job Information / AFE

Objective
Well Abandonment. Program will commence after access and camp are prepared. No SCVF's have been reported or expected.

PROGRAM SUMMARY

Read & record SIP(s). MIRU Service Rig, P-tank and associated equipment

Investigate status of SCVF/GM.

Rig in wellhead service and lubricator. Pull Cameron back pressure valve.

MIRU slick line unit. Pull A-3 tubing plug from 21mcf. Pressure test tubing to 7000 Kpa with water prior to pulling plug. Pull PX plug and prong from X profile at 1349.5m KB. Tag and record PBTD depth with blind box. Perforate hole in tubing above the upper packer. Rig out slick line.

Bleed off pressure to test P-tank. Circulate well to 6% KCL water (if needed) and kill well. Remove wellhead and install BOP's.

Unset hydraulic packers and pull tubing out of the hole. Lay down any bad joints.

RIH bit and scraper for 177.8mm casing on 73mm tubing string to PBTD. Circulate clean. Pull bit and scraper.

Run in hole with 73mm tubing and tag PBTD. Pull off bottom for cement job.

Rig in cementers and balance a 200-meter cement plug. Pull above plug and circulate to fresh water. Apply squeeze pressure. Wait on cement overnight.

Tag cement plug and record depth (Minimum of 15 meters above top perforation required). Pressure test to 7000 Kpa for 10 minutes. Bleed off pressure and pull tubing.

RIH with permanent bridge plug for 177.8mm casing on 73mm tubing string. Set bridge plug within 15m of tagged cement top. Pressure test bridge plug to 7000 Kpa for 10 minutes. Rotate off plug and balance 1m3 cement plug on bridge plug. Backwash with fresh water.

Pull out of hole and lay down tubing string.

Cut and cap the casing strings with vented cap.

Costs do not include access, camp or any associated SEQR

Target Formation
Hume

Daily Pressures

Subtype	P (kPa)
SICP	0
SITP	0

Operation Summary

Operations Next Report Period

Tag cement top. Pressure test wellbore to 7.0 MPa.

Operation at 6am

Boiler hand maintain heat on wellhead and tank farm

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00	7.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.
07:00	07:30	0.50	7.50	Safety Mtg	PP		Held day shift safety and operational meeting. Review contractor policies and procedures for travel, towing, and trip pipe operations. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/15/2024
Report #: 16

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical	
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00	

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
07:30	12:45	5.25	12.75	Cmt	PP		Rig in Cement Unit. Issue for 30 minutes starting deck motor. Test pump line 25.0 MPa. Mix and pump 2.0 m ³ ThixoFine + 0.05% CHFR-1 + 0.6% CHRT-L x 1700 kg/m ³ cement slurry. Yield 1.32 m ³ /t. Fluid loss 50 cc/30 min. Work time 2.5 hrs. Mix and pump Charger SQ = 1% CHGC-2 + 0.3% CHRT-L x 1700 kg/m ³ cement slurry. Yield 0.970 m ³ /t. Fluid loss 50 cc/30 min. Work time 2.8 hrs. Pump rate 450 L/min x 8.6 MPa. Displace behind (2) cement slurry 8.6 m ³ fresh (non-saline) water 25°C. Sting into Weatherford 10K Cement Retainer 1810.0 mKB. Set down 5,000 dan string weight on Cement Retainer. Squeeze 0.40 m ³ fresh (non-saline) water x 150 - 45 L/min x 14.5 MPa. Cement is now below the Cement Retainer at 1810 mKB. Squeeze 2.0 m ³ ThixoFine x 1700 kg/m ³ cement slurry in to formation 45 L/min - 60 L/min x 20 MPa (average). Squeeze 1.032 m ³ Charger SQ x 1700 kg/m ³ cement slurry in to formation 50 L/min x 20 MPa. Pressure climb to 22.8 MPa. Stop pump. Pressure 22.3 MPa after 10 minutes Sting out Weatherford Cement Retainer. Circulate and balance cement plug from 1810 mKB to 1710 mKB. Rig down pump line.
12:45	13:00	0.25	13.00	PRESS	PP		Rig in pump line. Pressure test wellbore to 7300 KPa. Held 10 minutes. Pressure drop to 6930 KPa. Possible air in well. Good test. Rig out cement unit line.
13:00	14:15	1.25	14.25	RIHPOOH	PP		Lay down (20) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m . Position tubing bottom 1570 mKB.
14:15	15:15	1.00	15.25	Circulating	PP		Rig in circulation lines. Reverse circulate 20 m ³ (total) fresh (non-saline) water at 500 L/min x 3.0 MPa. Returns show salinity 0 ppm. End returns are clean fresh (non-saline) water. Entire hole displaced to non-saline (fresh) water. Rig down circulation lines. Rig out and release cement units. Charger Cementing travel to MGM Km #16 camp.
15:15	15:30	0.25	15.50	POOH	PP		Lay down (5) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m . Position tubing bottom 1490 mKB.
15:30	16:00	0.50	16.00	SDFN	PP		Winterize, lines, pump and wellhead. SDFN rig crew.
16:00	18:30	2.50	18.50	WOC	PP		Wait on cement to harden over night.
18:30	19:00	0.50	19.00	Safety Mtg	PP		Held night shift safety and operational meeting. Review contractor policies and procedures for work alone and boiler hand to monitor temperature of water and equipment. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.
19:00	00:00	5.00	24.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night. End report for day.

6:00 Update

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00		PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.

Other In Hole

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Cement		178.0	1,810.30	1,812.32	2/15/2024 14:30
Cement		96.0	1,812.30	1,884.00	2/15/2024 14:31
Cement		165.0	1,717.00	1,810.00	2/15/2024 14:32
Fresh Water (Permanent)		165.0	100.00	1,717.00	2/16/2024 07:00
Steel Plate		406.0	7.10	7.20	2/19/2024 14:30
Glacier Tile		407.0	5.60	7.10	2/19/2024 14:31



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/15/2024
Report #: 16

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078				
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical					
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00					
Bill 30 Requirements (Head Count Only)									
Type		Count							
Day Shift									
Contractor Hours (Head Count & Hours)									
Type		Count		Reg Work Time (hr)					
Flare Permit									
Contract # C05380 C	Agreement Start Date 7/25/2016			Agreement End Date					
Flaring Volumes									
Type	Subtype	Des	Amount	Units					
		No Gas Flared							
Report Fluids Summary									
Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)				
Oil	0.00	27.50	-27.50						
Other			-3.02	3.02	0.00				
Water	26.50	0.00	-60.75	87.25	0.00				
Weather & Road Condition									
Weather		T (°C)	Road Cond						
Partly Cloudy		-23	Fair						



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/16/2024
Report #: 17

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078								
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical									
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00									
Casing Strings													
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread				
Conductor	1/31/2013	20.00	5.70	14.30	406.0								
Surface	2/10/2013	402.00	5.70	396.30	244.5								
Production	2/25/2013	1,988.00	5.70	1,982.30	177.8								
Liner	3/1/2013	1,964.97											
Zones / Event Sequence													
Zone Name		Zone Code			Current Status								
Canol		/00											
Blue Fish		/00											
Job Information / AFE													
Objective Well Abandonment. Program will commence after access and camp are prepared. No SCVF's have been reported or expected.													
PROGRAM SUMMARY													
Read & record SIP(s). MIRU Service Rig, P-tank and associated equipment													
Investigate status of SCVF/GM.													
Rig in wellhead service and lubricator. Pull Cameron back pressure valve.													
MIRU slick line unit. Pull A-3 tubing plug from 21mcf. Pressure test tubing to 7000 Kpa with water prior to pulling plug. Pull PX plug and prong from X profile at 1349.5m KB. Tag and record PBTD depth with blind box. Perforate hole in tubing above the upper packer. Rig out slick line.													
Bleed off pressure to test P-tank. Circulate well to 6% KCL water (if needed) and kill well. Remove wellhead and install BOP's.													
Unset hydraulic packers and pull tubing out of the hole. Lay down any bad joints.													
RIH bit and scraper for 177.8mm casing on 73mm tubing string to PBTD. Circulate clean. Pull bit and scraper.													
Run in hole with 73mm tubing and tag PBTD. Pull off bottom for cement job.													
Rig in cementers and balance a 200-meter cement plug. Pull above plug and circulate to fresh water. Apply squeeze pressure. Wait on cement overnight.													
Tag cement plug and record depth (Minimum of 15 meters above top perforation required). Pressure test to 7000 Kpa for 10 minutes. Bleed off pressure and pull tubing.													
RIH with permanent bridge plug for 177.8mm casing on 73mm tubing string. Set bridge plug within 15m of tagged cement top. Pressure test bridge plug to 7000 Kpa for 10 minutes. Rotate off plug and balance 1m3 cement plug on bridge plug. Backwash with fresh water.													
Pull out of hole and lay down tubing string.													
Cut and cap the casing strings with vented cap.													
Costs do not include access, camp or any associated SEQR													
Target Formation Hume													
Daily Pressures													
Subtype						P (kPa)							
SICP						0							
SITP						0							
Operation Summary													
Operations Next Report Period													
Rig down and travel PWS # 891 and support equipment to Norman Wells.													
Operation at 6am													
Wait on daylight.													
24 Hr Operational Comments													
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details						
00:00	07:00	7.00	7.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.						
07:00	07:30	0.50	7.50	Safety Mtg	PP		Held day shift safety and operational meeting. Review contractor policies and procedures for travel, towing, and trip pipe operations. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.						
07:30	08:30	1.00	8.50	RIHPOOH	PP		Run in (19) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m, Tag cement top 1717 mKB with 1800 daN weight.						
							Pull and lay down (2) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m. Tubing bottom 1693 mKB.						
08:30	09:00	0.50	9.00	BULLCIR	PP		Hookup circulation lines. Forward circulate 15 minute at 500 L/min x 8.7 MPa with fresh (non-saline) water. Return clean non-saline water.						
09:00	09:15	0.25	9.25	PRESS	PP		Pressure test 177.8 mm casing and cement plug to 7100 KPa with fresh (non-saline) water. Held 10 minutes. Pressure end at 7050 KPa. Good test. Bleed off pressure.						



Daily ARO Operations

Well: MGM EAST MACKAY I-78
 Pad: I-78-6450-12530
 Business Unit: Strategic Investments
 Rig:

Report Date: 2/16/2024
 Report #: 17

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical	
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00	

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
09:15	15:45	6.50	15.75	PU/LD	PP		Pull and lay down (140) Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m, Release Dash Energy Services and equipment.
							Change tubing handling equipment from 114 mm to 73 mm. Lay down (1) cross over Sub 73 mm x 88.9 mm x 114.3 mm x 0.42 m, (1) Pup Joint 73 mm x 1.24 m J-55 9.67 kg/m, 1) Pup Joint 73 mm x 3.08 m J-55 9.67 kg/m, (2) Joints Tubing 73 mm x 19.02 m J-55 9.67 kg/m, (1) Centralizer 143 mm x 73 mm x 0.28 m and (1) Weatherford 73 mm Cement Stinger.
15:45	16:00	0.25	16.00	BULLCIR	PP		Pump 2.3 m³ fresh (non-saline) water to fill casing to 110 mKB.
16:00	17:30	1.50	17.50	NU/ND WH/XT	PP		Rig down working floor, 34.5 MPa - Class III BOP, 279 mm x 179 mm - 34.5 MPa Adapter Flange and tubing handling equipment. Rig down accumulator lines.
							Install 179 mm - 34.5 MPa x 103 mm - 69 MPa Adapter Flange with Single 103 mm - 69 MPa Master Valve. Secure all wellhead outlets.
17:30	19:00	1.50	19.00	RU/RD	PP		De Pressure and drain 80 HP boiler. Empty and clean out (2) 63 m³ tanks and rig tank. Release vac unit to travel to High level Secure Disposal.
							Start rig down PWS # 891 and support equipment. No night boiler hand.
							Winterize equipment for night.
19:00	00:00	5.00	24.00	WOD	PP		End report for day.
							Wait on daylight.

6:00 Update

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00		PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.

Other In Hole

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Fresh Water (Permanent)		165.0	100.00	1,717.00	2/16/2024 07:00
Steel Plate		406.0	7.10	7.20	2/19/2024 14:30
Glacier Tile		407.0	5.60	7.10	2/19/2024 14:31

Bill 30 Requirements (Head Count Only)

Type	Count
Day Shift	16

Contractor Hours (Head Count & Hours)

Type	Count	Reg Work Time (hr)

Flare Permit

Contract # C05380 C	Agreement Start Date 7/25/2016	Agreement End Date
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Flaring Volumes

Type	Subtype	Des	Amount	Units
		No Gas Flared		

Report Fluids Summary

Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)
Oil	0.00	27.50	-27.50				
Other			-5.32	5.32	0.00	5.32	
Water	26.50	19.00	-79.75	87.25	0.00	87.25	

Weather & Road Condition

Weather	T (°C)	Road Cond
Partly Cloudy	-15	Fair



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/17/2024
Report #: 18

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
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Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical
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KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00
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Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/31/2013	20.00	5.70	14.30	406.0				
Surface	2/10/2013	402.00	5.70	396.30	244.5				
Production	2/25/2013	1,988.00	5.70	1,982.30	177.8				
Liner	3/1/2013	1,964.97							

Zones / Event Sequence

Zone Name	Zone Code	Current Status
Canol	/00	
Blue Fish	/00	

Job Information / AFE

Objective
Well Abandonment. Program will commence after access and camp are prepared. No SCVF's have been reported or expected.

PROGRAM SUMMARY

Read & record SIP(s). MIRU Service Rig, P-tank and associated equipment

Investigate status of SCVF/GM.

Rig in wellhead service and lubricator. Pull Cameron back pressure valve.

MIRU slick line unit. Pull A-3 tubing plug from 21mcf. Pressure test tubing to 7000 Kpa with water prior to pulling plug. Pull PX plug and prong from X profile at 1349.5m KB. Tag and record PBTD depth with blind box. Perforate hole in tubing above the upper packer. Rig out slick line.

Bleed off pressure to test P-tank. Circulate well to 6% KCL water (if needed) and kill well. Remove wellhead and install BOP's.

Unset hydraulic packers and pull tubing out of the hole. Lay down any bad joints.

RIH bit and scraper for 177.8mm casing on 73mm tubing string to PBTD. Circulate clean. Pull bit and scraper.

Run in hole with 73mm tubing and tag PBTD. Pull off bottom for cement job.

Rig in cementers and balance a 200-meter cement plug. Pull above plug and circulate to fresh water. Apply squeeze pressure. Wait on cement overnight.

Tag cement plug and record depth (Minimum of 15 meters above top perforation required). Pressure test to 7000 Kpa for 10 minutes. Bleed off pressure and pull tubing.

RIH with permanent bridge plug for 177.8mm casing on 73mm tubing string. Set bridge plug within 15m of tagged cement top. Pressure test bridge plug to 7000 Kpa for 10 minutes. Rotate off plug and balance 1m3 cement plug on bridge plug. Backwash with fresh water.

Pull out of hole and lay down tubing string.

Cut and cap the casing strings with vented cap.

Costs do not include access, camp or any associated SEQR

Target Formation
Hume

Daily Pressures

Subtype	P (kPa)
SICP	0
SITP	0

Operation Summary

Operations Next Report Period

Haul off location rentals. Rig crew travel to Yellow Knife.

Operation at 6am
Wait on daylight.

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00	7.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.
07:00	07:30	0.50	7.50	Safety Mtg	PP		Held day shift safety and operational meeting. Review contractor policies and procedures for travel, towing, and rig down operations. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.



Daily ARO Operations

Well: MGM EAST MACKAY I-78

Pad: I-78-6450-12530

Business Unit: Strategic Investments

Rig:

Report Date: 2/17/2024

Report #: 18

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical	
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00	

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
07:30	19:00	11.50	19.00	RU/RD	PP		Complete rig down and prepare for transportation PWS # 891 and support equipment. Clean and secure site. Travel PWS # 891 to Norman Wells. Secure rig in PWS yard. Rig crew to put equipment back in storage. Load and travel PWS doghouse, rig pump, rig tank and materials skid to yard in Norman Wells. Travel PWS 80 HP boiler to staging area on MGM Energy KM 16 camp. Cut n cap welder travel to Ft Simpson. Stack and prepare equipment on site for transport (4) light towers, bathroom, office building, garbage bin, rig matting, (2) 63 m ³ insulated tanks, fuel skid, Haul to Norman Wells for sale of (148) Joints Tubing Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m and (2) Cut Joints Tubing Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m to Goodfellow's Oilfield Supply. End report for day.
19:00	00:00	5.00	24.00	WOD	PP		Wait on daylight.

6:00 Update

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	07:00	7.00		PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.

Other In Hole

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Steel Plate		406.0	7.10	7.20	2/19/2024 14:30
Glacier Tile		407.0	5.60	7.10	2/19/2024 14:31

Bill 30 Requirements (Head Count Only)

Type	Count
Day Shift	17

Contractor Hours (Head Count & Hours)

Type	Count	Reg Work Time (hr)

Flare Permit

Contract # C05380 C	Agreement Start Date 7/25/2016	Agreement End Date
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Flaring Volumes

Type	Subtype	Des	Amount	Units
		No Gas Flared		

Report Fluids Summary

Fluid	Cum to Lease (m ³)	Cum fm lease (m ³)	Lease Bal (m ³)	Cum to Well (m ³)	Cum from Well (m ³)	Left to recover (m ³)	Cum Non-recov (m ³)
Oil	0.00	27.50	-27.50				
Other			-5.32	5.32	0.00	5.32	
Water	26.50	19.00	-79.75	87.25	0.00	87.25	

Weather & Road Condition

Weather	T (°C)	Road Cond
Partly Cloudy	-16	Fair



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/18/2024
Report #: 19

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078				
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical					
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00					
Casing Strings									
Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/31/2013	20.00	5.70	14.30	406.0				
Surface	2/10/2013	402.00	5.70	396.30	244.5				
Production	2/25/2013	1,988.00	5.70	1,982.30	177.8				
Liner	3/1/2013	1,964.97							
Zones / Event Sequence									
Zone Name	Zone Code	Current Status							
Canol	/00								
Blue Fish	/00								
Job Information / AFE									
Objective	Well Abandonment. Program will commence after access and camp are prepared. No SCVF's have been reported or expected.								
PROGRAM SUMMARY	Read & record SIP(s). MIRU Service Rig, P-tank and associated equipment								
Investigate status of SCVF/GM.	Investigate status of SCVF/GM.								
Rig in wellhead service and lubricator. Pull Cameron back pressure valve.	Rig in wellhead service and lubricator. Pull Cameron back pressure valve.								
MIRU slick line unit. Pull A-3 tubing plug from 21mcf. Pressure test tubing to 7000 Kpa with water prior to pulling plug. Pull PX plug and prong from X profile at 1349.5m KB. Tag and record PBTD depth with blind box. Perforate hole in tubing above the upper packer. Rig out slick line.	MIRU slick line unit. Pull A-3 tubing plug from 21mcf. Pressure test tubing to 7000 Kpa with water prior to pulling plug. Pull PX plug and prong from X profile at 1349.5m KB. Tag and record PBTD depth with blind box. Perforate hole in tubing above the upper packer. Rig out slick line.								
Bleed off pressure to test P-tank. Circulate well to 6% KCL water (if needed) and kill well. Remove wellhead and install BOP's.	Bleed off pressure to test P-tank. Circulate well to 6% KCL water (if needed) and kill well. Remove wellhead and install BOP's.								
Unset hydraulic packers and pull tubing out of the hole. Lay down any bad joints.	Unset hydraulic packers and pull tubing out of the hole. Lay down any bad joints.								
RIH bit and scraper for 177.8mm casing on 73mm tubing string to PBTD. Circulate clean. Pull bit and scraper.	RIH bit and scraper for 177.8mm casing on 73mm tubing string to PBTD. Circulate clean. Pull bit and scraper.								
Run in hole with 73mm tubing and tag PBTD. Pull off bottom for cement job.	Run in hole with 73mm tubing and tag PBTD. Pull off bottom for cement job.								
Rig in cementers and balance a 200-meter cement plug. Pull above plug and circulate to fresh water. Apply squeeze pressure. Wait on cement overnight.	Rig in cementers and balance a 200-meter cement plug. Pull above plug and circulate to fresh water. Apply squeeze pressure. Wait on cement overnight.								
Tag cement plug and record depth (Minimum of 15 meters above top perforation required). Pressure test to 7000 Kpa for 10 minutes. Bleed off pressure and pull tubing.	Tag cement plug and record depth (Minimum of 15 meters above top perforation required). Pressure test to 7000 Kpa for 10 minutes. Bleed off pressure and pull tubing.								
RIH with permanent bridge plug for 177.8mm casing on 73mm tubing string. Set bridge plug within 15m of tagged cement top. Pressure test bridge plug to 7000 Kpa for 10 minutes. Rotate off plug and balance 1m3 cement plug on bridge plug. Backwash with fresh water.	RIH with permanent bridge plug for 177.8mm casing on 73mm tubing string. Set bridge plug within 15m of tagged cement top. Pressure test bridge plug to 7000 Kpa for 10 minutes. Rotate off plug and balance 1m3 cement plug on bridge plug. Backwash with fresh water.								
Pull out of hole and lay down tubing string.	Pull out of hole and lay down tubing string.								
Cut and cap the casing strings with vented cap.	Cut and cap the casing strings with vented cap.								
Costs do not include access, camp or any associated SEQR	Costs do not include access, camp or any associated SEQR								
Target Formation Hume									
Daily Pressures									
Subtype	SICP	SITP			P (kPa)				
					0				
					0				
Operation Summary									
Operations Next Report Period									
Perform cut n cap operations. Rig crew finish travel to base.									
Operation at 6am									
Wait on daylight.									
24 Hr Operational Comments									
Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details		
00:00	07:00	7.00	7.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.		
07:00	07:30	0.50	7.50	Safety Mtg	PP		Held day shift safety and operational meeting. Review contractor policies and procedures for travel, towing, and rig down operations. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.		



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/18/2024
Report #: 19

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical	
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00	

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
07:30	19:00	11.50	19.00	RU/RD	PP		Rig crew fly to Yellowknife. Welder travel from Ft Simpson to MGM KM # 16 camp. Load and travel to Norman Wells for sale of (148) Joints Tubing Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m and (2) Cut Joints Tubing Joints Tubing 114.3 mm LT&C P-110 20.09 kg/m to Goodfellas Oilfield Supply. Load and haul (2) 63 m³ tanks, (1) office, (1) bathroom, (1) garbage bin, (2) pipe racks, (4) light towers and (1) loader back to base. Haul track hoe to site. No visible bubbles around wellhead. Swept area and around wellhead for LEL. None detected. Test Production Casing and Surface Casing for LEL. None detected. Confirm no existence of underground lines near well centre. Track hoe dig bellhole around wellhead to depth of 3.0 m. Ensure proper sloping and stairway exit. Spoil pile is on plastic and proper spacing away from bellhole. Stantech field representative obtain wall and base samples as per program. Secure bellhole for night. End of report for day.
19:00	00:00	5.00	24.00	WOD	PP		Wait on daylight.

6:00 Update

Start Time	End Time	Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	08:00	8.00		PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.

Other In Hole

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Steel Plate		406.0	7.10	7.20	2/19/2024 14:30
Glacier Tile		407.0	5.60	7.10	2/19/2024 14:31

Bill 30 Requirements (Head Count Only)

Type	Count
Day Shift	17

Contractor Hours (Head Count & Hours)

Type	Count	Reg Work Time (hr)

Flare Permit

Contract # C05380 C	Agreement Start Date 7/25/2016	Agreement End Date
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Flaring Volumes

Type	Subtype	Des	Amount	Units
		No Gas Flared		

Report Fluids Summary

Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)
Oil	0.00	27.50	-27.50				
Other			-5.32	5.32	0.00	5.32	
Water	26.50	19.00	-79.75	87.25	0.00	87.25	

Weather & Road Condition

Weather	T (°C)	Road Cond
Partly Cloudy	-16	Fair



Daily ARO Operations

Well: MGM EAST MACKAY I-78

Pad: I-78-6450-12530

Business Unit: Strategic Investments

Rig:

Report Date: 2/19/2024

Report #: 20

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
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Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical
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KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00
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Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/31/2013	20.00	5.70	14.30	406.0				
Surface	2/10/2013	402.00	5.70	396.30	244.5				
Production	2/25/2013	1,988.00	5.70	1,982.30	177.8				
Liner	3/1/2013	1,964.97							

Zones / Event Sequence

Zone Name	Zone Code	Current Status
Canol	/00	
Blue Fish	/00	

Job Information / AFE

Objective
Well Abandonment. Program will commence after access and camp are prepared. No SCVF's have been reported or expected.

PROGRAM SUMMARY

Read & record SIP(s). MIRU Service Rig, P-tank and associated equipment

Investigate status of SCVF/GM.

Rig in wellhead service and lubricator. Pull Cameron back pressure valve.

MIRU slick line unit. Pull A-3 tubing plug from 21mcf. Pressure test tubing to 7000 Kpa with water prior to pulling plug. Pull PX plug and prong from X profile at 1349.5m KB. Tag and record PBTD depth with blind box. Perforate hole in tubing above the upper packer. Rig out slick line.

Bleed off pressure to test P-tank. Circulate well to 6% KCL water (if needed) and kill well. Remove wellhead and install BOP's.

Unset hydraulic packers and pull tubing out of the hole. Lay down any bad joints.

RIH bit and scraper for 177.8mm casing on 73mm tubing string to PBTD. Circulate clean. Pull bit and scraper.

Run in hole with 73mm tubing and tag PBTD. Pull off bottom for cement job.

Rig in cementers and balance a 200-meter cement plug. Pull above plug and circulate to fresh water. Apply squeeze pressure. Wait on cement overnight.

Tag cement plug and record depth (Minimum of 15 meters above top perforation required). Pressure test to 7000 Kpa for 10 minutes. Bleed off pressure and pull tubing.

RIH with permanent bridge plug for 177.8mm casing on 73mm tubing string. Set bridge plug within 15m of tagged cement top. Pressure test bridge plug to 7000 Kpa for 10 minutes. Rotate off plug and balance 1m3 cement plug on bridge plug. Backwash with fresh water.

Pull out of hole and lay down tubing string.

Cut and cap the casing strings with vented cap.

Costs do not include access, camp or any associated SEQR

Target Formation Hume

Daily Pressures

Subtype	P (kPa)
SICP	0
SITP	0

Operation Summary

Operations Next Report Period

Wait on ground sample results from bell hole to determine how bell hole is to be back filled.

Operation at 6am

Wait on bell hole soil sample analysis to back fill.

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	08:00	8.00	8.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.
08:00	08:30	0.50	8.50	Safety Mtg	PP		Held day shift safety and operational meeting. Review contractor policies and procedures for travel, towing, and rig down operations. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/19/2024
Report #: 20

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical	
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00	

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
08:30	16:30	8.00	16.50	Cut/Cap	PP		Rig crew fly to Yellowknife to Edmonton. Journey management complete. No visible bubbles around wellhead. Swept area and around wellhead for LEL. None detected. Test Production Casing and Surface Casing for LEL. None detected. Cut away 2.4 m (7.20 mKB) of 406 mm conductor. Cement between conductor and surface casing. Cut window in 244.5 mm Surface Casing and 177.8 mm Production Casing. Cement between Surface Casing and Production Casing at surface. Cut 177.8 mm Production Casing 2.3 m (7.15 mKB) and 244.5 mm Surface Casing at 2.35 m (7.15mKB) depth below surface casing flange. Remove wellhead from bell hole. Stitch (vent) weld 6.3 mm plate on top of Production Casing and Surface Casing. Weld write I-78 / N2078 on 244.5 mm Production Casing cap. Install snow fence barrier around bell hole. Wait on ground sampling analysis from around wellhead to determine if able to back fill. End report for day.
16:30	00:00	7.50	24.00	WOO	PP		Wait on daylight

Other In Hole

Des	Icon	OD (mm)	Top Depth (mKB)	Btm (mKB)	Run Date
Steel Plate		406.0	7.10	7.20	2/19/2024 14:30
Glacier Tile		407.0	5.60	7.10	2/19/2024 14:31

Bill 30 Requirements (Head Count Only)

Type	Count
Day Shift	17

Contractor Hours (Head Count & Hours)

Type	Count	Reg Work Time (hr)

Flare Permit

Contract # C05380 C	Agreement Start Date 7/25/2016	Agreement End Date
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Flaring Volumes

Type	Subtype	Des	Amount	Units
		No Gas Flared		

Report Fluids Summary

Fluid	Cum to Lease (m ³)	Cum fm lease (m ³)	Lease Bal (m ³)	Cum to Well (m ³)	Cum from Well (m ³)	Left to recover (m ³)	Cum Non-recov (m ³)
Oil	0.00	27.50	-27.50				
Other			-5.32	5.32	0.00	5.32	
Water	26.50	19.00	-79.75	87.25	0.00	87.25	

Weather & Road Condition

Weather	T (°C)	Road Cond
Partly Cloudy	-15	Fair



Daily ARO Operations

Well: MGM EAST MACKAY I-78
Pad: I-78-6450-12530
Business Unit: Strategic Investments
Rig:

Report Date: 2/23/2024
Report #: 21

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
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Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical
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KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31	Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00
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Csg Des	Run Date	Set Depth (mKB)	Top (mKB)	Len (m)	OD (mm)	ID (mm)	Wt/Len (kg/m)	Grade	Top Thread
Conductor	1/31/2013	20.00	5.70	14.30	406.0				
Surface	2/10/2013	402.00	5.70	396.30	244.5				
Production	2/25/2013	1,988.00	5.70	1,982.30	177.8				
Liner	3/1/2013	1,964.97							

Zones / Event Sequence

Zone Name	Zone Code	Current Status
Canol	/00	
Blue Fish	/00	

Job Information / AFE

Objective
Well Abandonment. Program will commence after access and camp are prepared. No SCVF's have been reported or expected.

PROGRAM SUMMARY

Read & record SIP(s). MIRU Service Rig, P-tank and associated equipment

Investigate status of SCVF/GM.

Rig in wellhead service and lubricator. Pull Cameron back pressure valve.

MIRU slick line unit. Pull A-3 tubing plug from 21mcf. Pressure test tubing to 7000 Kpa with water prior to pulling plug. Pull PX plug and prong from X profile at 1349.5m KB. Tag and record PBTD depth with blind box. Perforate hole in tubing above the upper packer. Rig out slick line.

Bleed off pressure to test P-tank. Circulate well to 6% KCL water (if needed) and kill well. Remove wellhead and install BOP's.

Unset hydraulic packers and pull tubing out of the hole. Lay down any bad joints.

RIH bit and scraper for 177.8mm casing on 73mm tubing string to PBTD. Circulate clean. Pull bit and scraper.

Run in hole with 73mm tubing and tag PBTD. Pull off bottom for cement job.

Rig in cementers and balance a 200-meter cement plug. Pull above plug and circulate to fresh water. Apply squeeze pressure. Wait on cement overnight.

Tag cement plug and record depth (Minimum of 15 meters above top perforation required). Pressure test to 7000 Kpa for 10 minutes. Bleed off pressure and pull tubing.

RIH with permanent bridge plug for 177.8mm casing on 73mm tubing string. Set bridge plug within 15m of tagged cement top. Pressure test bridge plug to 7000 Kpa for 10 minutes. Rotate off plug and balance 1m3 cement plug on bridge plug. Backwash with fresh water.

Pull out of hole and lay down tubing string.

Cut and cap the casing strings with vented cap.

Costs do not include access, camp or any associated SEQR

Target Formation

Hume

Daily Pressures

Subtype	P (kPa)
SICP	
SITP	

Operation Summary

Operations Next Report Period

Job completed.

Operation at 6am

Job completed.

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
00:00	08:00	8.00	8.00	WOD	PP		Boiler hand maintain heat on wellhead, tank farm and equipment for night.
08:00	08:30	0.50	8.50	Safety Mtg	PP		Held day shift safety and operational meeting. Review contractor policies and procedures for travel, towing, and rig down operations. Discuss working in cold environment and controls. Review site hazards. Confirm contractors fit for duty.



Daily ARO Operations

Well: MGM EAST MACKAY I-78

Pad: I-78-6450-12530

Business Unit: Strategic Investments

Rig:

Report Date: 2/23/2024

Report #: 21

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	Field Name Great Bear River	State/Province NorthWest Territories	Working Interest (%) 0	License # N2078
Original KB Elevation (m) 160.70	Ground Elevation (m) 155.10	Casing Flange Elevation (m) 155.90	Tubing Head Elevation (m) 155.39	Well Configuration Type Vertical	
KB-Ground Distance (m) 5.60	KB-Tubing Head Distance (m) 5.31		Total Depth (mKB) 2,001.00	PBTD (All) (mKB) Original Hole - 1,975.00	

24 Hr Operational Comments

Start Time	End Time	Dur (hr)	Cum Dur (hr)	Time Code	Ops Category	NPT	Operation Details
08:30	16:00	7.50	16.00	Cut/Cap	PP		Remove bell hole isolation fencing. Back fill and tamp bellhole. Rough level surface ground. Install (orange)Tombomstone Surface Marker onto 73 mm pipe. Pipe is anchored and located 1.0 m x North of well centre. Weld write on tombstone marker. MGM Energy. 300/I-78-6450-12530/00. WID = N2078. 64°47'42.421"N. 125°43'19.1"W. 19-feb-2024. NAD 27 Cut n Cap job completed. Release contractors. Rig down and release camp. Job completed. *** Adjust final costs as received ***
16:00	00:00	8.00	24.00	No Job Activity	PP		Job completed.

Bill 30 Requirements (Head Count Only)

Type	Count
Day Shift	17

Contractor Hours (Head Count & Hours)

Type	Count	Reg Work Time (hr)

Flare Permit

Contract # C05380 C	Agreement Start Date 7/25/2016	Agreement End Date
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Flaring Volumes

Type	Subtype	Des	Amount	Units
		No Gas Flared		

Report Fluids Summary

Fluid	Cum to Lease (m³)	Cum fm lease (m³)	Lease Bal (m³)	Cum to Well (m³)	Cum from Well (m³)	Left to recover (m³)	Cum Non-recov (m³)
Oil	0.00	27.50	-27.50				
Other			-5.32	5.32	0.00	5.32	
Water	26.50	19.00	-79.75	87.25	0.00	87.25	

Weather & Road Condition

Weather	T (°C)	Road Cond
Partly Cloudy	-18	Fair



Tubing and Rods (Schematic)

Well Name: MGM EAST MACKAY I-78

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	License # N2078	Field Name Great Bear River	State/Province NorthWest Territories
Well Configuration Type Vertical	Original KB Elevation (m) 160.70	KB-Ground Distance (m) 5.60	KB-Casing Flange Distance (m) 4.80	KB-Tubing Head Distance (m) 5.31

Vertical, Original Hole, 2/21/2024 10:34:56 AM		<des> set at <depthbmt>mKB on <dttmrun>															
Vertical schematic (actual)		Tubing Description				Set Depth (mKB)		Run Date									
		Item #	Item Description	Joints	Length (m)	OD (mm)	ID (mm)	Wt (kg/m)	Grade								
Comment																	
Other In Hole																	
Description		Cement Retainer		OD (mm)	159.4	Top Depth (mKB)	1,810.00	Bottom Depth (mKB)	1,810.30								
Comment		Run Date 2/12/2024 09:15															
Weatherford 10K cement retainer																	
Description		Cement		OD (mm)	178.0	Top Depth (mKB)	1,810.30	Bottom Depth (mKB)	1,812.32								
Comment		Run Date 2/15/2024 14:30															
Description		Cement		OD (mm)	96.0	Top Depth (mKB)	1,812.30	Bottom Depth (mKB)	1,884.00								
Comment		Run Date 2/15/2024 14:31															
Description		Cement		OD (mm)	165.0	Top Depth (mKB)	1,717.00	Bottom Depth (mKB)	1,810.00								
Comment		Run Date 2/15/2024 14:32															
Description		Fresh Water (Permanent)		OD (mm)	165.0	Top Depth (mKB)	100.00	Bottom Depth (mKB)	1,717.00								
Comment		Run Date 2/16/2024 07:00															
Description		Steel Plate		OD (mm)	406.0	Top Depth (mKB)	7.10	Bottom Depth (mKB)	7.20								
Comment		Run Date 2/19/2024 14:30															
Description		Glacier Tile		OD (mm)	407.0	Top Depth (mKB)	5.60	Bottom Depth (mKB)	7.10								
Comment		Run Date 2/19/2024 14:31															
Liner set at 1,964.97 on 2/9/2024 14:30																	
String Description					Run Date		Set Depth (mKB)										
Liner					2/9/2024		1,964.97										
Item Description		Liner		Joints	1	Length (m)	1.15	OD (mm)	114.3								
Comment		Wt (kg/m) 20.090 Grade P-110															
Comment Jet Cut Casing Joint																	
Item Description		Profile Nipple		R	Joints	1	Length (m)	0.40	OD (mm) 114.3 Wt (kg/m) Grade								
Comment		P-110															
Comment LT&C Box x Pin Connections																	
Item Description		Liner Pup Joint		R	Joints	1	Length (m)	3.07	OD (mm) 114.3 Wt (kg/m) Grade								
Comment		P-110															
Item Description		Seal Assembly		R	Joints	1	Length (m)	2.17	OD (mm) 114.3 Wt (kg/m) Grade								
Comment																	
Item Description		Liner Hanger Packer		R	Joints	1	Length (m)	2.16	OD (mm) 177.8 Wt (kg/m) Grade								
Comment		P-110															
Item Description		Liner		R	Joints	1	Length (m)	12.09	OD (mm) 114.3 Wt (kg/m) Grade								
Comment		P-110															
Item Description		Profile Nipple		R	Joints	1	Length (m)	0.40	OD (mm) 114.3 Wt (kg/m) Grade								
Comment																	
Comment LT&C Box x Pin Connections – Gauges to be Hung off Lock after Frac																	



Tubing and Rods (Schematic)

Well Name: MGM EAST MACKAY I-78

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	License # N2078	Field Name Great Bear River	State/Province NorthWest Territories																																																																																																																																																																																																																																														
Well Configuration Type Vertical	Original KB Elevation (m) 160.70	KB-Ground Distance (m) 5.60	KB-Casing Flange Distance (m) 4.80	KB-Tubing Head Distance (m) 5.31																																																																																																																																																																																																																																														
Vertical, Original Hole, 2/21/2024 10:34:58 AM																																																																																																																																																																																																																																																		
Vertical schematic (actual)																																																																																																																																																																																																																																																		
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Pin x Box</td><td></td> <td>Joints 1</td> <td>Length (m) 0.27</td> <td>OD (mm) 114.3</td> <td>Wt (kg/m)</td> <td>Grade</td> </tr> <tr> <td colspan="5">Comment (Supplied by Weatherford)</td><td></td><td></td></tr> <tr> <td>Item Description Liner Pup Joint</td><td></td> <td>Joints 1</td> <td>Length (m) 3.07</td> <td>OD (mm) 114.3</td> <td>Wt (kg/m) 20.090</td> <td>Grade L-80</td> </tr> <tr> <td colspan="5">Comment</td><td></td><td></td></tr> </table>					Item Description Liner		Joints 1	Length (m) 12.00	OD (mm) 114.3	Wt (kg/m) 20.090	Grade P-110	Comment							Item Description Frac Sleeve		Joints 1	Length (m) 1.23	OD (mm) 114.3	Wt (kg/m)	Grade	Comment 86.49mm Ball Seat ID and Requires a 89.03mm Ball							Item Description Liner Pup Joint		Joints 3	Length (m) 8.00	OD (mm) 114.3	Wt (kg/m) 20.090	Grade P-110	Comment							Item Description Open Hole Packer		Joints 1	Length (m) 3.57	OD (mm) 114.3	Wt (kg/m)	Grade	Comment							Item Description Liner		Joints 1	Length (m) 12.10	OD (mm) 114.3	Wt (kg/m) 20.090	Grade P-110	Comment							Item Description Frac Sleeve		Joints 1	Length (m) 1.23	OD (mm) 114.3	Wt (kg/m)	Grade	Comment 83.31mm Ball Seat ID and Requires a 85.85mm Ball							Item Description Liner Pup Joint		Joints 1	Length (m) 1.86	OD (mm) 114.3	Wt (kg/m) 20.090	Grade P-110	Comment							Item Description Open Hole Packer		Joints 1	Length (m) 3.58	OD (mm) 114.3	Wt (kg/m)	Grade	Comment							Item Description Liner Pup Joint		Joints 1	Length (m) 6.14	OD (mm) 114.3	Wt (kg/m) 20.090	Grade P-110	Comment							Item Description Frac Sleeve		Joints 1	Length (m) 1.23	OD (mm) 114.3	Wt (kg/m)	Grade	Comment 80.14mm Ball Seat ID and Requires a 82.68mm Ball							Item Description Liner Pup Joint		Joints 1	Length (m) 8.00	OD (mm) 114.3	Wt (kg/m) 20.090	Grade P-110	Comment							Item Description Open Hole Packer		Joints 1	Length (m) 3.64	OD (mm) 114.3	Wt (kg/m)	Grade	Comment							Item Description Liner		Joints 1	Length (m) 36.29	OD (mm) 114.3	Wt (kg/m) 20.090	Grade P-110	Comment							Item Description Open Hole Packer		Joints 1	Length (m) 3.63	OD (mm) 114.3	Wt (kg/m)	Grade	Comment							Item Description Anchor Assembly		Joints 1	Length (m) 3.87	OD (mm) 177.8	Wt (kg/m)	Grade	Comment							Item Description Crossover - 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Tubing and Rods (Schematic)

Well Name: MGM EAST MACKAY I-78

API/UWI 300/I-78-6450-12530/00	Surface Legal Location I-78-6450-12530	License # N2078	Field Name Great Bear River	State/Province NorthWest Territories
Well Configuration Type Vertical	Original KB Elevation (m) 160.70	KB-Ground Distance (m) 5.60	KB-Casing Flange Distance (m) 4.80	KB-Tubing Head Distance (m) 5.31

Vertical, Original Hole, 2/21/2024 10:35:00 AM		Item Description Profile Nipple											
Vertical schematic (actual)													
Gauges to be Hung off Lock													
		Item Description Liner Pup Joint		Joints 1	Length (m) 3.07	OD (mm) 114.3	Wt (kg/m)						
Comment													
		Item Description Toe Sleeve		Joints 1	Length (m) 1.06	OD (mm) 114.3	Wt (kg/m)						
Comment													
		Item Description Toe Sleeve		Joints 1	Length (m) 1.06	OD (mm) 114.3	Wt (kg/m)						
Comment													
		Item Description Liner Pup Joint		Joints 1	Length (m) 3.07	OD (mm) 88.9	Wt (kg/m)						
Comment													
		Item Description Liner Pup Joint		Joints 1	Length (m) 3.07	OD (mm) 88.9	Wt (kg/m)						
Comment													
		Item Description Landing Collar		Joints 1	Length (m) 0.24	OD (mm) 114.7	Wt (kg/m)						
Comment													
		Item Description Liner Pup Joint		Joints 1	Length (m) 3.05	OD (mm) 88.9	Wt (kg/m)						
Comment													
		Item Description Float Collar		Joints 1	Length (m) 0.25	OD (mm) 114.3	Wt (kg/m)						
Comment													
		Item Description Liner Pup Joint		Joints 1	Length (m) 3.05	OD (mm) 88.9	Wt (kg/m)						
Comment													
		Item Description Float Shoe		Joints 1	Length (m) 3.05	OD (mm) 114.3	Wt (kg/m)						
Comment													
Perforation Statuses													
	Date	Top (mKB)	Top (TVD) (mKB)	Btm (mKB)	Btm (TVD) (mKB)	Status							
	2/28/2013	1,840.00	1,839.98	1,842.00	1,841.98	Squeezed							
	2/28/2013	1,847.00	1,846.98	1,849.00	1,848.98	Squeezed							
	2/28/2013	1,869.00	1,868.98	1,871.00	1,870.98	Squeezed							
	2/28/2013	1,882.00	1,881.97	1,884.00	1,883.97	Squeezed							
	2/28/2013	1,946.00	1,945.90	1,948.00	1,947.90	Standing							
Cement Stages													
	Cementing Start Date 1/31/2013	String Conductor, 20.00mKB	Description Conductor Cement			Objective							
	Top Depth (mKB) 5.70	Top Depth(TVD) (mKB) 5.70	Bottom Depth (mKB) 20.00			Bottom Depth (TVD) (mKB) 20.00							
	Cementing Start Date 2/10/2013	String Surface, 402.00mKB	Description Surface Casing Cement			Objective							
	Top Depth (mKB) 5.70	Top Depth(TVD) (mKB) 5.70	Bottom Depth (mKB) 402.00			Bottom Depth (TVD) (mKB) 401.99							
	Cementing Start Date 2/25/2013	String Production, 1,988.00mKB	Description Production Casing Cement			Objective							
	Top Depth (mKB) 5.70	Top Depth(TVD) (mKB) 5.70	Bottom Depth (mKB) 1,988.00			Bottom Depth (TVD) (mKB) 1,987.88							

