

N.E.B. COPY

Schlumberger

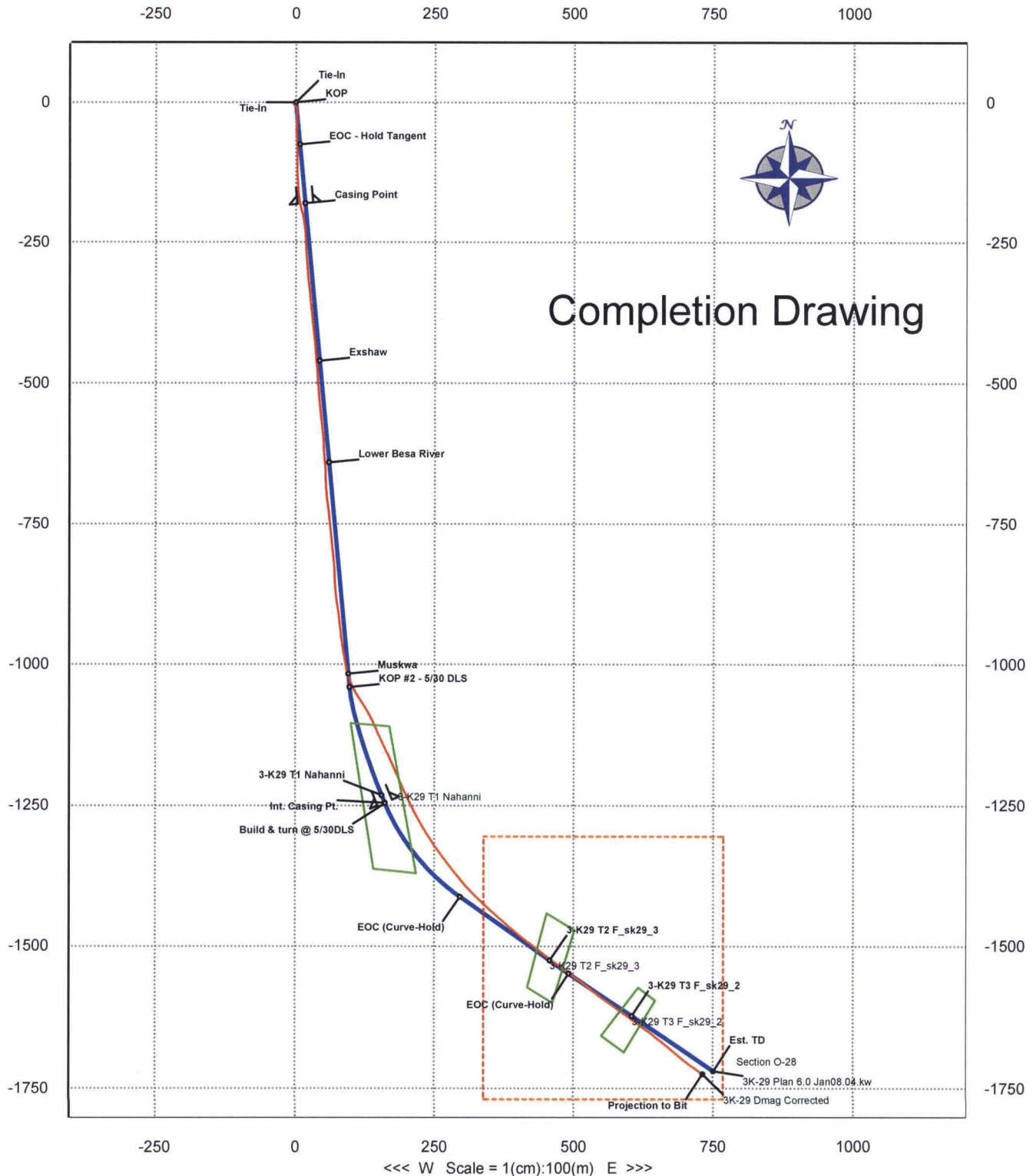
40009921

CHEVRON TEXACO
POST WELL ANALYSIS REPORT FOR
FT. LIARD
FT. LIARD 3K-29

Schlumberger Private

WELL 3K-29	FIELD FT. LIARD(CDN-NAD27)	STRUCTURE Chevron K-29 PAD
Magnetic Parameters Model: BGM 2003 Dip: 78.547° Mag Dec: +24.496° Date: January 30, 2004 FS: 58727.0 nT	Surface Location Lat: N80 28 42.337 Lon: W123 35 3.406 NAD27 UTM Zone 10N Northing: 6704631.49 m Easting: 467880.97 m Grid Conv: -0.50842687° Scale Fact: 0.9996126403	Miscellaneous Slot: Job#4000 3-K29 Plan: 3K-29 Plan 6.0 Jan08.04.kw TVD Ref: KB (416.90 m above MSL) Srvy Date: January 08, 2004

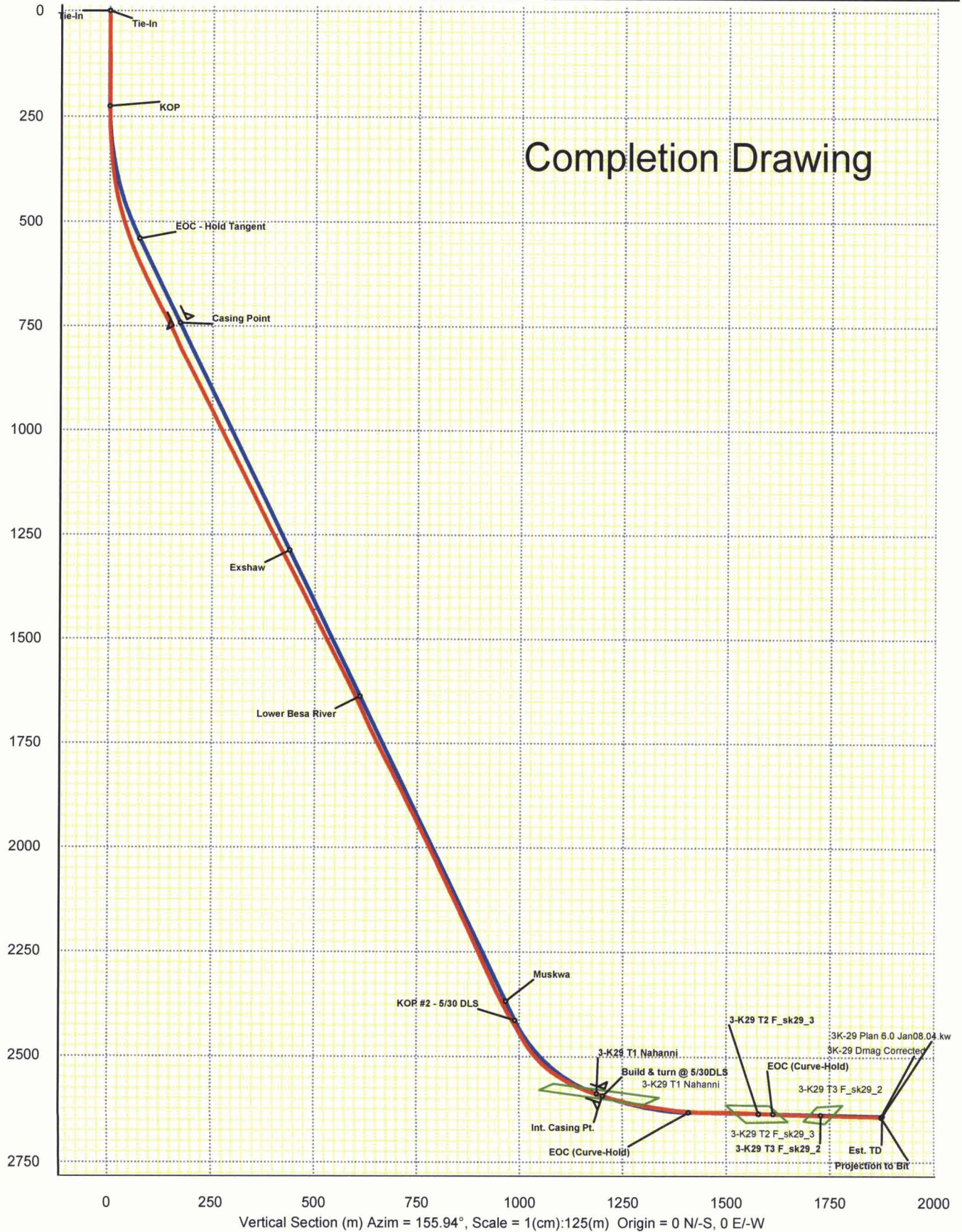
<<< S Scale = 1(cm):100(m) N >>>



WELL 3K-29	FIELD FT. LIARD(CDN-NAD27)	STRUCTURE Chevron K-29 PAD
Magnetic Parameters Model: BGGM 2003 Dip: 78.547° Mag Dec: +24.496°	Surface Location Lat: N60 28 42.337 Lon: W123 35 3.406 NAD27 UTM Zone 10N Northing: 6704631.49 m Easting: 467880.97 m Grid Conv: -0.50842687° Scale Fact: 0.9996126403	Miscellaneous Slot: Job#4000 3-K29 Plan: 3K-29 Plan 6.0 Jan08.04.kw TVD Ref: KB (416.90 m above MSL) Srvy Date: January 06, 2004

Completion Drawing

TVD Scale = 1(cm):125(m)



ChevronTexaco Ft Liard 3K-29 Final Survey Report

Report Date: March 1, 2004	Survey / DLS Computation Method: Minimum Curvature / Lubinski
Client: CHEVRON CANADA RESOURCES	Vertical Section Azimuth: 155.940°
Field: FT. LIARD(CDN-NAD27)	Vertical Section Origin: N 0.000 m, E 0.000 m
Structure / Slot: Chevron K-29 PAD / Job#4000 3-K29	TVD Reference Datum: KB
Well: 3K-29	TVD Reference Elevation: 416.9 m relative to MSL
Borehole: 3-K29 Hole 1	Sea Bed / Ground Level Elevation: 409.900 m relative to MSL
UWI/API#:	Magnetic Declination: 24.498°
Survey Name / Date: 3K-29 Dmag Corrected / January 28, 2004	Total Field Strength: 58727.218 nT
Tort / AHD / DDI / ERD ratio: 301.427° / 2001.20 m / 6.443 / 0.757	Magnetic Dip: 78.548°
Grid Coordinate System: NAD27 UTM Zone 10N	Declination Date: January 28, 2004
Location Lat/Long: N 60 28 42.337, W 123 35 3.406	Magnetic Declination Model: BGGM 2003
Location Grid N/E Y/X: N 6704631.490 m, E 467880.970 m	North Reference: True North
Grid Convergence Angle: -0.50842687°	Total Corr Mag North -> True North: +24.498°
Grid Scale Factor: 0.99961264	Local Coordinates Referenced To: Well Head

Comments	Measured Depth (m)	Inclination (deg)	Azimuth (deg)	TVD (m)	Vertical Section (m)	NS (m)	EW (m)	Closure (m)	Closure Azimuth (deg)	DLS (deg/30 m)	Tool Face (deg)
Tie-In	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-132.81M
Mud Line	7.00	0.05	227.19	7.00	0.00	0.00	0.00	0.00	227.19	0.22	-132.81M
	75.15	0.54	227.19	75.15	0.11	-0.24	-0.26	0.35	227.19	0.22	-151.57M
	103.90	0.64	208.43	103.90	0.26	-0.47	-0.44	0.64	222.59	0.23	-171.89M
	132.60	0.66	188.11	132.60	0.49	-0.78	-0.54	0.94	214.51	0.24	-108.35M
	156.30	1.69	251.65	156.29	0.57	-1.02	-0.89	1.35	220.88	1.92	-111.40M
	184.30	1.98	248.60	184.28	0.51	-1.33	-1.73	2.18	232.42	0.33	-109.46M
	211.53	2.52	250.54	211.49	0.44	-1.70	-2.73	3.22	238.08	0.60	-102.96M
	223.00	2.49	257.04	222.94	0.37	-1.84	-3.21	3.70	240.17	0.75	-106.84M
	232.40	2.39	253.16	232.34	0.31	-1.94	-3.60	4.09	241.62	0.62	-113.73M
	241.80	2.11	246.27	241.73	0.28	-2.07	-3.94	4.45	242.31	1.24	-117.33M
	250.90	1.64	242.67	250.82	0.29	-2.20	-4.21	4.75	242.46	1.60	-148.63M
	260.10	1.08	211.37	260.02	0.35	-2.33	-4.38	4.96	241.94	2.97	169.13M
	269.20	1.62	169.13	269.12	0.52	-2.53	-4.40	5.07	240.06	3.61	151.45M
	278.10	2.18	151.45	278.01	0.81	-2.80	-4.29	5.13	236.84	2.71	138.74M
	287.30	2.97	138.74	287.20	1.21	-3.14	-4.05	5.12	232.25	3.16	135.68M
	306.00	3.58	135.68	305.87	2.22	-3.92	-3.32	5.14	220.30	1.02	138.28M
	315.80	4.23	138.28	315.65	2.85	-4.41	-2.87	5.26	213.06	2.06	135.25M
	325.20	4.70	135.25	325.02	3.55	-4.94	-2.37	5.48	205.60	1.68	139.26M
	334.80	5.04	139.26	334.59	4.32	-5.54	-1.81	5.83	198.14	1.50	26.83G
	344.50	5.78	142.92	344.25	5.20	-6.25	-1.24	6.37	191.24	2.52	45.86G
	354.20	6.33	147.85	353.89	6.21	-7.09	-0.66	7.12	185.34	2.34	42.25G
	363.90	6.93	152.22	363.53	7.32	-8.06	-0.11	8.06	180.75	2.42	72.10G
	373.60	7.13	156.68	373.15	8.51	-9.13	0.41	9.14	177.46	1.80	50.41G
	383.50	7.72	161.73	382.97	9.78	-10.33	0.86	10.37	175.26	2.66	56.05G
	393.20	8.38	167.97	392.57	11.12	-11.64	1.21	11.70	174.07	3.38	46.02G
	402.90	9.25	173.33	402.16	12.56	-13.11	1.45	13.19	173.70	3.70	37.04G
	412.44	10.46	178.21	411.56	14.09	-14.73	1.56	14.82	173.95	4.62	14.30G
	422.10	11.76	179.83	421.04	15.80	-16.59	1.59	16.67	174.52	4.15	2.10G
	431.80	12.72	179.99	430.52	17.68	-18.65	1.60	18.72	175.11	2.97	-7.18G
	441.50	13.44	179.60	439.97	19.69	-20.85	1.60	20.91	175.60	2.24	3.69G
	451.20	14.53	179.88	449.38	21.83	-23.19	1.61	23.25	176.02	3.38	4.31G
	480.00	16.75	180.46	477.11	28.91	-30.95	1.59	30.99	177.06	2.32	46.38G
	489.77	17.69	183.62	486.44	31.51	-33.84	1.48	33.87	177.49	4.07	-34.35G
	518.60	19.56	179.88	513.76	39.80	-43.04	1.22	43.06	178.38	2.31	43.67G
	528.40	20.38	182.09	522.97	42.83	-46.39	1.16	46.40	178.57	3.41	-44.27G
	538.10	20.72	181.16	532.06	45.90	-49.79	1.06	49.80	178.78	1.46	-61.26G
	547.90	21.11	179.24	541.21	49.09	-53.29	1.05	53.30	178.87	2.41	-38.04G
	556.90	21.91	177.58	549.58	52.14	-56.59	1.14	56.60	178.84	3.35	-19.24G
	566.90	22.94	176.66	558.83	55.69	-60.40	1.34	60.41	178.73	3.26	-31.92G
	576.70	23.76	175.40	567.82	59.34	-64.27	1.60	64.29	178.57	2.94	22.10G
	586.20	24.35	175.98	576.50	62.99	-68.13	1.90	68.16	178.41	2.01	7.22G
	595.40	25.26	176.25	584.85	66.61	-71.98	2.16	72.02	178.28	2.99	35.26G
	605.50	26.35	177.97	593.94	70.71	-76.37	2.38	76.41	178.22	3.93	-7.01G
	615.00	27.36	177.70	602.42	74.69	-80.66	2.54	80.70	178.20	3.21	84.17G

Comments	Measured Depth (m)	Inclination (deg)	Azimuth (deg)	TVD (m)	Vertical Section (m)	NS (m)	EW (m)	Closure (m)	Closure Azimuth (deg)	DLS (deg/30 m)	Tool Face (deg)
	624.40	27.41	178.69	610.77	78.69	-84.98	2.68	85.03	178.20	1.46	111.26G
	634.30	27.28	179.43	619.56	82.87	-89.53	2.75	89.57	178.24	1.10	63.33G
	644.00	27.64	180.94	628.17	86.95	-94.00	2.74	94.04	178.33	2.42	28.48G
	653.80	27.70	181.01	636.85	91.07	-98.55	2.66	98.59	178.45	0.21	97.36G
	663.30	27.68	181.35	645.26	95.07	-102.97	2.57	103.00	178.57	0.50	-49.55G
	673.00	28.21	180.05	653.83	99.20	-107.51	2.51	107.54	178.66	2.50	-18.49G
	682.80	28.51	179.84	662.45	103.45	-112.17	2.52	112.20	178.71	0.97	-9.14G
	692.41	29.27	179.59	670.86	107.70	-116.81	2.54	116.84	178.75	2.40	135.80G
	702.00	29.15	179.83	679.24	111.98	-121.49	2.56	121.52	178.79	0.52	-101.02G
	711.60	29.01	178.25	687.63	116.27	-126.15	2.64	126.18	178.80	2.44	-63.74G
	721.20	29.29	177.11	696.01	120.61	-130.83	2.83	130.86	178.76	1.94	-60.00G
	730.70	29.52	176.31	704.29	124.98	-135.48	3.10	135.52	178.69	1.44	125.35G
	740.10	29.44	176.54	712.47	129.31	-140.10	3.39	140.14	178.61	0.44	58.41G
	759.40	29.73	177.48	729.25	138.20	-149.62	3.88	149.67	178.51	0.85	-147.69G
	787.50	27.58	174.50	753.91	150.85	-163.05	4.81	163.12	178.31	2.76	-143.93G
	821.50	24.43	168.76	784.47	165.17	-177.79	6.94	177.93	177.76	3.55	-90.00G
	831.20	24.43	167.19	793.30	169.10	-181.71	7.78	181.88	177.55	2.01	9.22G
	840.20	25.63	167.64	801.46	172.83	-185.43	8.60	185.63	177.34	4.05	-27.37G
	850.08	27.28	165.79	810.30	177.15	-189.71	9.62	189.96	177.10	5.60	-29.74G
	859.30	28.35	164.51	818.46	181.40	-193.87	10.72	194.17	176.83	3.99	137.85G
	868.40	28.23	164.74	826.47	185.66	-198.03	11.87	198.38	176.57	0.53	77.74G
	877.10	28.50	167.14	834.12	189.73	-202.04	12.87	202.45	176.36	4.04	96.06G
	887.00	28.38	170.19	842.83	194.33	-206.66	13.80	207.12	176.18	4.42	126.50G
	896.50	27.70	172.21	851.21	198.64	-211.07	14.48	211.57	176.08	3.69	-134.01G
	904.00	27.50	171.76	857.86	201.98	-214.51	14.96	215.03	176.01	1.16	86.51G
	914.70	27.53	172.71	867.35	206.72	-219.41	15.63	219.97	175.92	1.23	-62.97G
	923.90	27.63	172.29	875.51	210.80	-223.63	16.19	224.22	175.86	0.71	42.87G
	933.00	28.30	173.59	883.54	214.88	-227.87	16.71	228.48	175.81	2.99	67.16G
	942.70	28.68	175.41	892.07	219.27	-232.47	17.15	233.11	175.78	2.93	106.19G
	951.80	28.30	178.41	900.07	223.32	-236.81	17.39	237.44	175.80	4.88	-93.22G
	959.60	28.28	177.56	906.94	226.75	-240.50	17.52	241.14	175.83	1.55	80.12G
	970.50	28.38	178.71	916.53	231.54	-245.67	17.69	246.31	175.88	1.53	-99.04G
	980.00	28.25	176.81	924.89	235.72	-250.17	17.86	250.81	175.92	2.88	80.29G
	988.60	28.30	177.41	932.47	239.52	-254.24	18.07	254.88	175.93	1.01	-90.00G
	1002.40	28.30	176.81	944.62	245.62	-260.77	18.40	261.42	175.96	0.62	-84.85G
	1012.70	28.35	175.74	953.68	250.20	-265.65	18.72	266.31	175.97	1.49	129.52G
	1021.60	28.08	176.44	961.53	254.15	-269.85	19.00	270.52	175.97	1.44	-109.44G
	1031.60	27.95	175.64	970.36	258.56	-274.53	19.33	275.21	175.97	1.19	142.35G
	1040.80	27.55	176.31	978.50	262.59	-278.81	19.63	279.50	175.97	1.65	-54.69G
	1049.60	28.10	174.69	986.28	266.46	-282.90	19.95	283.61	175.97	3.19	-25.30G
	1060.40	28.20	174.59	995.80	271.28	-287.98	20.43	288.70	175.94	0.31	33.56G
	1069.60	28.43	174.91	1003.90	275.41	-292.32	20.83	293.06	175.92	0.90	84.76G
	1078.90	28.50	176.34	1012.08	279.59	-296.74	21.16	297.49	175.92	2.21	-87.38G
	1088.80	28.53	175.19	1020.78	284.03	-301.45	21.51	302.22	175.92	1.67	-129.81G
	1098.50	28.38	174.81	1029.31	288.40	-306.06	21.92	306.84	175.90	0.73	23.23G
	1108.10	28.83	175.21	1037.73	292.75	-310.64	22.32	311.44	175.89	1.53	-123.21G
	1117.40	28.50	174.14	1045.89	296.97	-315.08	22.73	315.90	175.87	1.97	-95.34G
	1127.40	28.45	172.89	1054.68	301.52	-319.81	23.27	320.66	175.84	1.79	136.45G
	1136.60	28.40	172.99	1062.77	305.70	-324.16	23.81	325.03	175.80	0.23	175.49G
	1146.10	28.28	173.01	1071.14	310.01	-328.64	24.36	329.54	175.76	0.38	137.15G
	1155.80	27.83	173.91	1079.70	314.36	-333.17	24.88	334.10	175.73	1.91	106.16G
	1165.00	27.68	175.06	1087.84	318.43	-337.43	25.29	338.38	175.71	1.81	-2.70G
	1174.90	28.18	175.01	1096.58	322.81	-342.05	25.69	343.02	175.71	1.52	121.78G
	1184.10	27.95	175.81	1104.70	326.89	-346.37	26.04	347.34	175.70	1.44	-102.28G
	1193.44	27.85	174.79	1112.96	331.01	-350.72	26.39	351.71	175.70	1.57	-60.65G
	1203.50	28.28	173.21	1121.83	335.51	-355.43	26.89	356.45	175.67	2.56	-105.81G
	1213.00	28.15	172.21	1130.21	339.81	-359.88	27.46	360.93	175.64	1.55	108.02G
	1222.10	27.80	174.66	1138.24	343.88	-364.12	27.95	365.20	175.61	3.96	166.48G
	1231.90	27.55	174.79	1146.92	348.19	-368.66	28.37	369.75	175.60	0.79	-98.83G
	1241.50	27.48	173.76	1155.44	352.40	-373.07	28.81	374.18	175.58	1.50	47.22G
	1251.20	27.85	174.61	1164.03	356.68	-377.55	29.26	378.68	175.57	1.67	-157.13G

Comments	Measured Depth (m)	Inclination (deg)	Azimuth (deg)	TVD (m)	Vertical Section (m)	NS (m)	EW (m)	Closure (m)	Closure Azimuth (deg)	DLS (deg/30 m)	Tool Face (deg)
	1260.85	27.50	174.29	1172.57	360.93	-382.01	29.70	383.16	175.55	1.18	125.77G
	1270.20	27.20	175.21	1180.88	365.00	-386.29	30.09	387.46	175.55	1.66	-24.40G
	1279.40	27.63	174.79	1189.04	369.00	-390.51	30.46	391.69	175.54	1.54	-63.33G
	1289.30	28.10	172.86	1197.80	373.40	-395.11	30.96	396.32	175.52	3.08	-109.13G
	1299.00	27.98	172.11	1206.36	377.77	-399.63	31.55	400.87	175.49	1.15	68.36G
	1308.40	28.25	173.51	1214.65	382.01	-404.02	32.11	405.30	175.46	2.27	84.38G
	1317.90	28.33	175.04	1223.01	386.29	-408.50	32.56	409.80	175.44	2.30	-122.29G
	1327.60	28.10	174.26	1231.56	390.63	-413.07	32.98	414.38	175.43	1.34	14.09G
	1336.90	28.48	174.46	1239.75	394.81	-417.46	33.42	418.79	175.42	1.26	-95.31G
	1347.00	28.45	173.74	1248.63	399.38	-422.24	33.91	423.60	175.41	1.02	-85.88G
	1356.30	28.50	172.46	1256.81	403.62	-426.65	34.45	428.03	175.38	1.98	64.69G
	1365.50	28.75	173.54	1264.88	407.83	-431.02	34.98	432.44	175.36	1.87	47.85G
	1375.30	29.25	174.66	1273.45	412.35	-435.75	35.47	437.19	175.35	2.26	101.62G
	1384.90	29.00	177.46	1281.84	416.73	-440.41	35.79	441.86	175.35	4.33	-84.85G
	1394.10	29.05	176.41	1289.88	420.90	-444.86	36.03	446.32	175.37	1.67	-139.89G
	1404.00	28.85	176.06	1298.55	425.40	-449.64	36.34	451.11	175.38	0.79	-92.29G
	1413.20	28.83	174.64	1306.61	429.58	-454.07	36.70	455.55	175.38	2.23	80.69G
	1422.20	28.90	175.49	1314.49	433.69	-458.40	37.08	459.89	175.38	1.39	-170.10G
	1432.60	28.68	175.41	1323.60	438.41	-463.39	37.48	464.90	175.38	0.64	-93.72G
	1442.20	28.63	173.26	1332.03	442.78	-467.97	37.93	469.50	175.37	3.23	55.79G
	1451.50	28.98	174.31	1340.18	447.04	-472.42	38.41	473.98	175.35	1.98	109.19G
	1461.10	28.80	175.41	1348.58	451.43	-477.04	38.83	478.62	175.35	1.75	108.94G
	1470.80	28.48	177.46	1357.09	455.78	-481.68	39.12	483.27	175.36	3.20	-58.11G
	1480.30	28.63	176.96	1365.44	460.01	-486.22	39.34	487.81	175.37	0.89	90.00G
	1489.80	28.63	177.06	1373.78	464.26	-490.76	39.58	492.36	175.39	0.15	-109.32G
	1497.60	28.58	176.76	1380.62	467.75	-494.49	39.78	496.09	175.40	0.58	-102.62G
	1508.70	28.38	174.74	1390.38	472.73	-499.77	40.17	501.38	175.40	2.66	-113.40G
	1518.50	28.15	173.59	1399.01	477.14	-504.39	40.64	506.02	175.39	1.81	90.00G
	1528.20	28.15	174.86	1407.57	481.48	-508.94	41.10	510.60	175.38	1.85	72.20G
	1537.50	28.33	176.01	1415.76	485.63	-513.33	41.45	515.00	175.38	1.85	109.59G
	1547.10	28.25	176.49	1424.21	489.90	-517.87	41.75	519.55	175.39	0.75	-104.13G
	1556.80	28.18	175.89	1432.76	494.20	-522.44	42.06	524.13	175.40	0.90	-98.71G
	1566.10	28.08	174.39	1440.96	498.34	-526.81	42.43	528.52	175.40	2.30	61.92G
	1575.90	28.35	175.44	1449.60	502.72	-531.43	42.84	533.15	175.39	1.73	17.73G
	1585.50	28.65	175.64	1458.03	507.03	-535.99	43.19	537.73	175.39	0.98	-100.04G
	1594.90	28.48	173.41	1466.29	511.29	-540.47	43.62	542.22	175.39	3.45	151.53G
	1604.60	28.15	173.79	1474.83	515.68	-545.04	44.14	546.82	175.37	1.16	117.90G
	1614.30	27.83	175.11	1483.39	520.00	-549.57	44.58	551.37	175.36	2.16	-39.43G
	1623.60	28.10	174.64	1491.61	524.12	-553.91	44.97	555.73	175.36	1.12	-146.74G
	1633.40	27.83	174.26	1500.26	528.48	-558.49	45.41	560.33	175.35	0.99	-87.82G
	1642.90	27.88	172.26	1508.66	532.71	-562.89	45.93	564.76	175.34	2.96	45.55G
	1652.10	28.23	173.01	1516.78	536.86	-567.18	46.49	569.09	175.31	1.62	84.28G
	1661.80	28.28	173.99	1525.33	541.24	-571.75	47.01	573.68	175.30	1.44	52.15G
	1671.50	28.38	174.26	1533.87	545.61	-576.33	47.48	578.28	175.29	0.50	-158.14G
	1681.00	28.18	174.09	1542.23	549.89	-580.80	47.93	582.78	175.28	0.68	-79.96G
	1690.50	28.30	172.74	1550.60	554.17	-585.27	48.45	587.27	175.27	2.05	-17.61G
	1700.10	28.42	172.66	1559.05	558.54	-589.79	49.03	591.83	175.25	0.39	30.77G
	1709.70	28.95	173.31	1567.47	562.94	-594.37	49.59	596.43	175.23	1.92	111.43G
	1719.20	28.55	175.54	1575.80	567.28	-598.91	50.04	601.00	175.22	3.61	103.07G
	1728.80	28.33	177.69	1584.24	571.55	-603.48	50.31	605.57	175.23	3.27	25.46G
	1738.50	28.43	177.79	1592.78	575.84	-608.08	50.49	610.18	175.25	0.34	-132.55G
	1747.80	28.33	177.56	1600.96	579.94	-612.50	50.67	614.59	175.27	0.48	94.06G
	1757.30	28.30	178.56	1609.32	584.12	-617.00	50.82	619.09	175.29	1.50	-106.06G
	1764.50	28.20	177.81	1615.66	587.27	-620.41	50.93	622.50	175.31	1.54	-87.86G
	1772.90	28.28	174.96	1623.06	590.99	-624.37	51.18	626.47	175.31	4.82	169.95G
	1782.80	28.20	174.99	1631.79	595.42	-629.04	51.59	631.15	175.31	0.25	128.26G
	1792.20	27.68	176.43	1640.09	599.57	-633.43	51.92	635.56	175.31	2.72	-104.13G
	1801.40	27.45	174.31	1648.25	603.58	-637.68	52.26	639.81	175.31	3.29	-104.68G
	1811.30	27.40	173.89	1657.03	607.91	-642.21	52.73	644.37	175.31	0.61	168.54G
	1820.90	26.80	174.16	1665.58	612.07	-646.56	53.19	648.74	175.30	1.91	115.31G
	1830.10	26.15	177.46	1673.82	615.93	-650.65	53.49	652.84	175.30	5.24	71.46G
	1839.90	26.43	179.26	1682.60	619.94	-654.99	53.61	657.18	175.32	2.59	8.01G

Comments	Measured Depth (m)	Inclination (deg)	Azimuth (deg)	TVD (m)	Vertical Section (m)	NS (m)	EW (m)	Closure (m)	Closure Azimuth (deg)	DLS (deg/30 m)	Tool Face (deg)
	1849.50	26.75	179.36	1691.19	623.88	-659.28	53.66	661.46	175.35	1.01	-53.66G
	1858.60	26.85	179.06	1699.31	627.65	-663.39	53.72	665.56	175.37	0.55	-49.44G
	1868.60	27.68	177.01	1708.20	631.90	-667.96	53.88	670.13	175.39	3.76	-90.00G
	1878.20	27.68	176.39	1716.70	636.07	-672.42	54.13	674.59	175.40	0.90	120.40G
	1887.60	27.58	176.76	1725.03	640.15	-676.77	54.39	678.95	175.40	0.63	44.33G
	1897.30	28.18	177.99	1733.60	644.37	-681.30	54.60	683.48	175.42	2.57	-114.84G
	1906.10	28.13	177.76	1741.36	648.22	-685.45	54.75	687.63	175.43	0.41	-98.41G
	1916.30	27.95	174.66	1750.36	652.72	-690.23	55.07	692.43	175.44	4.32	168.80G
	1926.10	27.53	174.84	1759.04	657.03	-694.77	55.49	696.99	175.43	1.31	0.00G
	1935.70	28.00	174.84	1767.53	661.26	-699.23	55.89	701.46	175.43	1.47	-77.80G
	1945.00	28.10	173.89	1775.74	665.41	-703.58	56.32	705.83	175.42	1.48	-68.29G
	1954.80	28.48	171.96	1784.37	669.86	-708.19	56.89	710.47	175.41	3.03	-95.93G
	1964.30	28.43	170.86	1792.72	674.22	-712.66	57.57	714.99	175.38	1.66	166.10G
	1973.30	28.05	171.06	1800.65	678.33	-716.87	58.24	719.23	175.36	1.31	70.74G
	1983.30	28.33	172.69	1809.46	682.87	-721.55	58.91	723.95	175.33	2.46	76.20G
	2002.40	28.65	175.21	1826.25	691.53	-730.60	59.86	733.05	175.32	1.95	-100.67G
	2012.00	28.51	173.54	1834.68	695.89	-735.17	60.31	737.64	175.31	2.53	-35.73G
	2020.10	28.63	173.36	1841.80	699.59	-739.02	60.76	741.52	175.30	0.55	110.07G
	2030.60	28.53	173.94	1851.02	704.37	-744.01	61.31	746.54	175.29	0.84	149.00G
	2040.60	28.10	174.49	1859.82	708.87	-748.73	61.79	751.28	175.28	1.51	-88.66G
	2050.10	28.13	172.76	1868.20	713.14	-753.18	62.29	755.75	175.27	2.58	75.45G
	2059.40	28.35	174.46	1876.39	717.33	-757.55	62.78	760.15	175.26	2.69	82.21G
	2069.20	28.38	174.91	1885.02	721.74	-762.19	63.21	764.81	175.26	0.66	-104.29G
	2078.80	28.20	173.34	1893.47	726.06	-766.72	63.67	769.36	175.25	2.39	70.93G
	2088.40	28.38	174.41	1901.92	730.39	-771.24	64.16	773.90	175.24	1.68	0.00G
	2097.90	28.43	174.41	1910.28	734.68	-775.74	64.60	778.42	175.24	0.16	-109.02G
	2107.30	28.33	173.79	1918.55	738.92	-780.18	65.06	782.89	175.23	0.99	124.01G
	2116.80	27.98	174.91	1926.92	743.18	-784.64	65.50	787.37	175.23	2.00	-60.04G
	2126.40	28.15	174.29	1935.40	747.45	-789.14	65.92	791.89	175.22	1.06	-119.99G
	2136.00	27.85	173.16	1943.87	751.75	-793.62	66.42	796.39	175.22	1.90	-77.65G
	2145.50	27.90	173.64	1952.27	755.98	-798.03	66.93	800.83	175.21	0.73	-144.96G
	2155.20	27.88	173.61	1960.84	760.31	-802.54	67.43	805.37	175.20	0.08	136.06G
	2164.70	27.30	174.84	1969.26	764.48	-806.92	67.87	809.77	175.19	2.57	67.40G
	2174.30	27.53	176.01	1977.79	768.65	-811.32	68.23	814.19	175.19	1.83	-77.20G
	2183.80	27.75	174.06	1986.20	772.81	-815.71	68.61	818.59	175.19	2.94	-142.37G
	2193.50	27.60	173.81	1994.79	777.10	-820.19	69.08	823.10	175.19	0.59	85.49G
	2202.90	27.68	175.66	2003.12	781.23	-824.54	69.48	827.46	175.18	2.75	90.00G
	2212.40	27.68	177.74	2011.53	785.35	-828.94	69.74	831.87	175.19	3.05	-102.81G
	2222.00	27.60	176.96	2020.04	789.50	-833.39	69.94	836.32	175.20	1.16	126.57G
	2231.40	27.43	177.46	2028.37	793.55	-837.73	70.16	840.66	175.21	0.92	90.00G
	2241.10	27.43	178.56	2036.98	797.69	-842.19	70.31	845.12	175.23	1.57	-111.74G
	2250.70	27.17	177.09	2045.51	801.77	-846.59	70.48	849.52	175.24	2.26	50.86G
	2260.10	27.55	178.09	2053.86	805.79	-850.91	70.66	853.84	175.25	1.90	-102.05G
	2269.80	27.30	175.24	2062.47	809.96	-855.37	70.92	858.30	175.26	4.13	109.18G
	2279.30	27.10	176.54	2070.92	814.05	-859.70	71.23	862.64	175.26	1.98	-65.39G
	2288.20	27.18	176.16	2078.84	817.85	-863.75	71.49	866.70	175.27	0.64	-82.26G
	2298.40	27.30	174.41	2087.91	822.26	-868.40	71.87	871.37	175.27	2.38	-78.80G
	2307.90	27.38	173.56	2096.35	826.40	-872.74	72.33	875.73	175.26	1.26	-112.24G
	2316.70	27.30	173.13	2104.17	830.26	-876.76	72.80	879.77	175.25	0.73	160.78G
	2327.10	27.13	173.26	2113.42	834.80	-881.48	73.36	884.53	175.24	0.52	-90.00G
	2336.60	27.13	172.46	2121.87	838.95	-885.78	73.90	888.85	175.23	1.15	-116.83G
	2345.60	26.85	171.21	2129.89	842.88	-889.82	74.48	892.93	175.22	2.11	-69.90G
	2357.80	26.90	170.91	2140.77	848.20	-895.27	75.34	898.43	175.19	0.36	146.15G
	2367.40	26.45	171.59	2149.35	852.36	-899.53	75.99	902.73	175.17	1.70	-138.32G
	2376.80	25.90	170.46	2157.79	856.36	-903.62	76.64	906.87	175.15	2.37	78.98G
	2386.40	26.08	172.41	2166.42	860.41	-907.78	77.27	911.06	175.14	2.73	52.79G
	2396.20	26.58	173.86	2175.20	864.57	-912.10	77.78	915.41	175.13	2.49	153.48G
	2405.50	26.27	174.21	2183.53	868.50	-916.21	78.21	919.55	175.12	1.12	-138.47G
	2415.10	25.83	173.31	2192.15	872.51	-920.40	78.67	923.76	175.11	1.85	-70.27G
	2424.50	25.89	172.93	2200.61	876.43	-924.47	79.16	927.86	175.11	0.56	-113.32G
	2433.80	25.86	172.77	2208.98	880.31	-928.50	79.67	931.91	175.10	0.25	-6.24G
	2443.80	25.90	172.76	2217.98	884.49	-932.83	80.22	936.27	175.08	0.12	-147.77G

Comments	Measured Depth (m)	Inclination (deg)	Azimuth (deg)	TVD (m)	Vertical Section (m)	NS (m)	EW (m)	Closure (m)	Closure Azimuth (deg)	DLS (deg/30 m)	Tool Face (deg)
	2453.30	25.66	172.41	2226.53	888.45	-936.93	80.75	940.40	175.07	0.90	98.00G
	2462.40	25.60	173.46	2234.73	892.21	-940.84	81.24	944.34	175.07	1.51	90.00G
	2472.40	25.60	174.24	2243.75	896.33	-945.13	81.70	948.66	175.06	1.01	-35.65G
	2481.90	25.77	173.96	2252.31	900.24	-949.23	82.12	952.77	175.06	0.66	-50.86G
	2491.40	25.92	173.54	2260.86	904.18	-953.34	82.57	956.91	175.05	0.75	-80.42G
	2501.10	26.10	171.34	2269.58	908.26	-957.56	83.13	961.16	175.04	3.04	90.00G
	2510.70	26.10	171.56	2278.20	912.33	-961.74	83.76	965.38	175.02	0.30	-80.74G
	2520.00	26.23	169.89	2286.55	916.29	-965.78	84.42	969.47	175.00	2.41	96.25G
	2529.60	26.15	171.81	2295.16	920.39	-969.97	85.10	973.69	174.99	2.66	-131.98G
	2539.30	25.85	171.04	2303.88	924.48	-974.17	85.73	977.93	174.97	1.40	-80.39G
	2548.60	25.98	169.41	2312.25	928.42	-978.18	86.42	981.99	174.95	2.34	-85.01G
	2558.40	26.00	168.91	2321.06	932.60	-982.39	87.23	986.26	174.93	0.67	50.05G
	2568.00	26.48	170.18	2329.67	936.73	-986.57	88.00	990.48	174.90	2.31	33.24G
	2577.50	27.08	171.04	2338.15	940.87	-990.79	88.69	994.75	174.88	2.26	4.00G
	2587.00	28.23	171.21	2346.56	945.12	-995.15	89.38	999.15	174.87	3.64	-12.44G
	2596.60	29.00	170.86	2354.99	949.56	-999.69	90.09	1003.74	174.85	2.46	-37.49G
	2606.00	29.85	169.56	2363.18	954.04	-1004.24	90.88	1008.34	174.83	3.39	-140.95G
	2615.70	28.98	168.09	2371.63	958.68	-1008.91	91.80	1013.08	174.80	3.50	-116.13G
	2626.80	28.35	165.26	2381.37	963.91	-1014.09	93.03	1018.35	174.76	4.04	-73.71G
	2636.20	28.70	162.91	2389.63	968.36	-1018.41	94.26	1022.76	174.71	3.75	-35.65G
	2645.70	30.67	160.18	2397.88	973.04	-1022.87	95.75	1027.34	174.65	7.54	-69.08G
	2655.40	31.20	157.63	2406.20	978.02	-1027.52	97.54	1032.14	174.58	4.37	-72.41G
	2664.60	31.50	155.89	2414.06	982.80	-1031.92	99.43	1036.70	174.50	3.11	169.89G
	2674.50	30.23	156.34	2422.56	987.88	-1036.56	101.49	1041.52	174.41	3.91	-115.60G
	2683.60	29.73	154.16	2430.44	992.43	-1040.69	103.39	1045.81	174.33	3.95	-122.61G
	2692.70	29.35	152.93	2438.36	996.91	-1044.71	105.39	1050.01	174.24	2.36	-68.19G
	2702.70	29.95	150.08	2447.05	1001.84	-1049.05	107.75	1054.57	174.14	4.60	-52.62G
	2711.70	30.30	149.18	2454.83	1006.33	-1052.95	110.04	1058.68	174.03	1.90	-45.81G
	2721.90	31.73	146.44	2463.57	1011.53	-1057.39	112.84	1063.40	173.91	5.91	7.79G
	2731.70	33.85	146.96	2471.81	1016.77	-1061.83	115.75	1068.12	173.78	6.55	-10.64G
	2740.90	35.88	146.31	2479.36	1021.96	-1066.22	118.64	1072.80	173.65	6.73	21.60G
	2750.90	38.02	147.68	2487.35	1027.89	-1071.26	121.91	1078.18	173.51	6.88	1.43G
	2759.90	40.90	147.79	2494.30	1033.56	-1076.10	124.97	1083.33	173.38	9.60	27.94G
	2770.00	43.57	149.83	2501.78	1040.29	-1081.91	128.48	1089.51	173.23	8.91	23.26G
	2779.00	45.26	150.85	2508.20	1046.56	-1087.38	131.60	1095.32	173.10	6.12	50.66G
	2789.70	46.51	152.92	2515.65	1054.22	-1094.16	135.21	1102.48	172.96	5.44	28.48G
	2799.20	48.87	154.61	2522.05	1061.24	-1100.46	138.32	1109.12	172.84	8.43	31.26G
	2808.10	51.29	156.48	2527.76	1068.07	-1106.67	141.14	1115.64	172.73	9.48	-8.60G
	2817.50	54.75	155.84	2533.41	1075.57	-1113.54	144.18	1122.83	172.62	11.16	8.84G
	2826.60	56.96	156.25	2538.52	1083.10	-1120.42	147.23	1130.05	172.51	7.37	-31.17G
	2836.30	58.82	154.94	2543.68	1091.32	-1127.90	150.63	1137.92	172.39	6.70	-124.07G
	2845.70	58.43	154.26	2548.57	1099.34	-1135.15	154.07	1145.56	172.27	2.23	-21.96G
	2855.70	59.09	153.95	2553.76	1107.89	-1142.84	157.81	1153.69	172.14	2.13	26.16G
	2864.60	60.51	154.75	2558.23	1115.58	-1149.78	161.14	1161.01	172.02	5.32	-27.37G
	2874.20	63.05	153.28	2562.77	1124.03	-1157.38	164.84	1169.06	171.89	8.91	45.88G
	2884.40	65.01	155.49	2567.24	1133.20	-1165.65	168.80	1177.81	171.76	8.21	-23.37G
	2893.50	66.39	154.84	2570.98	1141.49	-1173.17	172.29	1185.76	171.65	4.95	14.39G
	2921.50	69.91	155.80	2581.40	1167.47	-1196.79	183.14	1210.72	171.30	3.89	0.00G
	2931.40	71.03	155.80	2584.71	1176.80	-1205.30	186.96	1219.71	171.18	3.39	-8.30G
	2941.30	71.55	155.72	2587.89	1186.18	-1213.85	190.81	1228.75	171.07	1.59	7.65G
	2950.70	72.33	155.83	2590.80	1195.11	-1222.00	194.48	1237.37	170.96	2.51	-43.36G
	2959.60	73.46	154.72	2593.42	1203.62	-1229.72	198.03	1245.57	170.85	5.22	-27.41G
	2969.70	74.24	154.30	2596.23	1213.32	-1238.48	202.21	1254.88	170.73	2.61	-29.44G
	2979.10	75.84	153.37	2598.66	1222.39	-1246.63	206.21	1263.57	170.61	5.86	46.67G
	2988.40	76.17	153.73	2600.90	1231.41	-1254.71	210.23	1272.20	170.49	1.55	-94.33G
	2998.00	76.03	151.71	2603.21	1240.71	-1262.99	214.50	1281.08	170.36	6.14	-51.79G
	3007.40	76.49	151.11	2605.44	1249.82	-1271.01	218.87	1289.72	170.23	2.37	-26.72G
	3017.10	77.46	150.61	2607.63	1259.23	-1279.26	223.48	1298.64	170.09	3.36	-55.85G
	3026.80	78.34	149.29	2609.66	1268.66	-1287.47	228.23	1307.54	169.95	4.83	-55.91G
	3036.60	79.14	148.09	2611.58	1278.20	-1295.68	233.22	1316.51	169.80	4.36	-75.64G
	3045.70	79.35	147.26	2613.28	1287.04	-1303.24	238.00	1324.79	169.65	2.78	-71.03G

Comments	Measured Depth (m)	Inclination (deg)	Azimuth (deg)	TVD (m)	Vertical Section (m)	NS (m)	EW (m)	Closure (m)	Closure Azimuth (deg)	DLS (deg/30 m)	Tool Face (deg)
	3055.70	79.70	146.23	2615.09	1296.75	-1311.46	243.39	1333.85	169.49	3.21	-52.11G
	3065.10	80.50	145.19	2616.71	1305.86	-1319.11	248.61	1342.33	169.33	4.15	-42.80G
	3074.40	81.13	144.60	2618.19	1314.87	-1326.62	253.89	1350.70	169.17	2.77	-64.76G
	3084.10	81.72	143.34	2619.64	1324.26	-1334.38	259.53	1359.38	168.99	4.26	-65.06G
	3093.80	82.27	142.15	2620.99	1333.61	-1342.02	265.35	1368.00	168.82	4.02	131.49G
	3102.90	81.85	142.63	2622.25	1342.37	-1349.16	270.85	1376.08	168.65	2.09	-79.54G
	3112.90	82.06	141.49	2623.65	1351.98	-1356.97	276.93	1384.94	168.47	3.44	-37.74G
	3122.40	82.47	141.17	2624.93	1361.09	-1364.32	282.82	1393.33	168.29	1.64	-59.61G
	3131.60	83.10	140.09	2626.08	1369.89	-1371.38	288.61	1401.42	168.12	4.05	-42.44G
	3141.50	83.72	139.52	2627.22	1379.34	-1378.89	294.95	1410.08	167.93	2.54	-15.80G
	3151.10	85.27	139.08	2628.14	1388.50	-1386.13	301.18	1418.48	167.74	5.03	-82.69G
	3160.70	85.44	137.76	2628.92	1397.62	-1393.29	307.53	1426.83	167.55	4.15	-86.84G
	3170.30	85.54	135.98	2629.67	1406.66	-1400.27	314.08	1435.07	167.36	5.55	-59.24G
	3179.80	85.95	135.29	2630.38	1415.55	-1407.05	320.70	1443.13	167.16	2.53	-42.20G
	3189.20	86.71	134.60	2630.98	1424.31	-1413.67	327.34	1451.08	166.96	3.27	-32.84G
	3199.00	87.67	133.98	2631.46	1433.40	-1420.51	334.35	1459.33	166.76	3.50	-32.60G
	3208.50	89.14	133.04	2631.72	1442.18	-1427.05	341.23	1467.28	166.55	5.51	-66.18G
	3218.20	89.86	131.41	2631.81	1451.06	-1433.57	348.42	1475.30	166.34	5.51	-47.83G
	3227.80	90.34	130.88	2631.79	1459.78	-1439.88	355.65	1483.15	166.13	2.23	115.24G
	3237.30	89.76	132.11	2631.78	1468.43	-1446.18	362.76	1490.98	165.92	4.29	-80.06G
	3246.70	90.03	130.57	2631.80	1476.97	-1452.38	369.82	1498.73	165.71	4.99	90.00G
	3256.60	90.03	131.32	2631.79	1485.95	-1458.87	377.30	1506.87	165.50	2.27	-73.58G
	3266.10	90.31	130.37	2631.77	1494.55	-1465.09	384.48	1514.70	165.30	3.13	23.20G
	3275.50	90.38	130.40	2631.71	1503.03	-1471.18	391.64	1522.41	165.09	0.24	-132.91G
	3294.80	88.15	128.00	2631.96	1520.26	-1483.37	406.60	1538.09	164.67	5.09	-79.92G
	3304.30	88.36	126.82	2632.25	1528.60	-1489.14	414.14	1545.65	164.46	3.78	-96.35G
	3314.10	88.35	126.73	2632.53	1537.16	-1495.00	421.98	1553.42	164.24	0.28	63.43G
	3323.60	88.60	127.23	2632.78	1545.47	-1500.72	429.57	1560.99	164.03	1.76	-97.13G
	3333.10	88.56	126.91	2633.02	1553.78	-1506.44	437.15	1568.59	163.82	1.02	106.40G
	3343.30	88.46	127.25	2633.28	1562.71	-1512.59	445.28	1576.77	163.60	1.04	-74.27G
	3352.90	88.77	126.15	2633.51	1571.09	-1518.32	452.98	1584.46	163.39	3.57	116.03G
	3362.30	88.36	126.99	2633.75	1579.28	-1523.92	460.52	1591.99	163.19	2.98	144.48G
	3371.80	88.15	127.14	2634.04	1587.59	-1529.65	468.10	1599.67	162.98	0.81	-81.88G
	3381.50	88.53	124.49	2634.32	1595.98	-1535.32	475.96	1607.40	162.78	8.28	115.25G
	3390.20	88.12	125.36	2634.57	1603.43	-1540.30	483.09	1614.28	162.59	3.32	139.75G
	3400.50	87.53	125.86	2634.96	1612.31	-1546.29	491.46	1622.51	162.37	2.25	-48.52G
	3410.04	87.91	125.43	2635.34	1620.54	-1551.85	499.21	1630.16	162.17	1.80	105.79G
	3420.00	87.67	126.28	2635.73	1629.16	-1557.68	507.27	1638.19	161.96	2.66	120.90G
	3429.50	87.18	127.10	2636.15	1637.44	-1563.35	514.88	1645.95	161.77	3.01	0.00G
	3439.30	87.71	127.10	2636.59	1646.01	-1569.25	522.69	1654.01	161.58	1.62	65.27G
	3448.50	88.18	128.12	2636.92	1654.10	-1574.86	529.98	1661.65	161.40	3.66	-23.53G
	3458.40	89.42	127.58	2637.13	1662.84	-1580.94	537.79	1669.90	161.21	4.10	-77.61G
	3467.90	89.62	126.67	2637.21	1671.16	-1586.67	545.37	1677.78	161.03	2.94	-101.25G
	3478.00	89.28	124.96	2637.31	1679.90	-1592.58	553.55	1686.04	160.83	5.18	-175.01G
	3487.60	88.25	124.87	2637.51	1688.12	-1598.07	561.43	1693.82	160.64	3.23	-117.27G
	3497.10	88.08	124.54	2637.82	1696.24	-1603.48	569.23	1701.52	160.46	1.17	104.62G
	3506.60	87.70	126.00	2638.17	1704.40	-1608.96	576.98	1709.29	160.27	4.76	106.71G
	3516.20	87.67	126.10	2638.55	1712.72	-1614.61	584.74	1717.23	160.09	0.33	-8.78G
	3525.80	88.77	125.93	2638.85	1721.04	-1620.25	592.50	1725.18	159.91	3.48	-63.74G
	3535.20	89.14	125.18	2639.02	1729.14	-1625.71	600.14	1732.95	159.74	2.67	74.80G
	3545.10	89.42	126.21	2639.15	1737.70	-1631.49	608.18	1741.16	159.56	3.23	-75.97G
	3554.50	89.69	125.13	2639.22	1745.81	-1636.97	615.82	1748.97	159.38	3.55	96.92G
	3563.90	89.49	126.78	2639.29	1753.95	-1642.49	623.43	1756.82	159.22	5.30	-133.40G
	3573.80	88.97	126.23	2639.42	1762.58	-1648.38	631.39	1765.16	159.04	2.29	136.34G
	3583.40	88.53	126.65	2639.63	1770.93	-1654.08	639.11	1773.25	158.87	1.90	105.54G
	3592.80	88.28	127.55	2639.89	1779.16	-1659.75	646.60	1781.25	158.72	2.98	117.17G
	3602.50	88.08	127.94	2640.20	1787.70	-1665.68	654.27	1789.57	158.56	1.36	75.57G
	3612.20	88.42	129.26	2640.50	1796.32	-1671.73	661.84	1797.98	158.40	4.21	-58.29G
	3621.70	88.97	128.37	2640.71	1804.77	-1677.68	669.24	1806.24	158.25	3.30	79.96G
	3631.60	89.11	129.16	2640.88	1813.58	-1683.88	676.96	1814.86	158.10	2.43	10.49G
	3641.00	89.38	129.21	2641.00	1821.97	-1689.82	684.25	1823.10	157.96	0.88	-8.28G
	3650.80	89.93	129.13	2641.06	1830.72	-1696.01	691.85	1831.69	157.81	1.70	-94.09G

Comments	Measured Depth (m)	Inclination (deg)	Azimuth (deg)	TVD (m)	Vertical Section (m)	NS (m)	EW (m)	Closure (m)	Closure Azimuth (deg)	DLS (deg/30 m)	Tool Face (deg)
	3660.30	89.79	127.17	2641.09	1839.12	-1701.88	699.32	1839.95	157.66	6.21	-119.84G
	3670.00	88.97	125.74	2641.19	1847.56	-1707.64	707.12	1848.26	157.51	5.10	-144.22G
	3682.80	87.57	124.73	2641.58	1858.56	-1715.02	717.57	1859.09	157.30	4.05	-128.03G
Projection to Bit	3700.00	87.00	124.00	2642.39	1873.20	-1724.72	731.75	1873.53	157.01	1.61	0.00G

Survey Type: Definitive Survey

Survey Error Model: SLB ISCWSA version 16 *** 3-D 95.00% Confidence 2.7955 sigma

Surveying Prog:

MD From (m)

0.00

759.40

MD To (m)

759.40

3700.00

EOU Freq

Act-Stns

Act-Stns

Survey Tool Type

SLB_MWD+DMAG

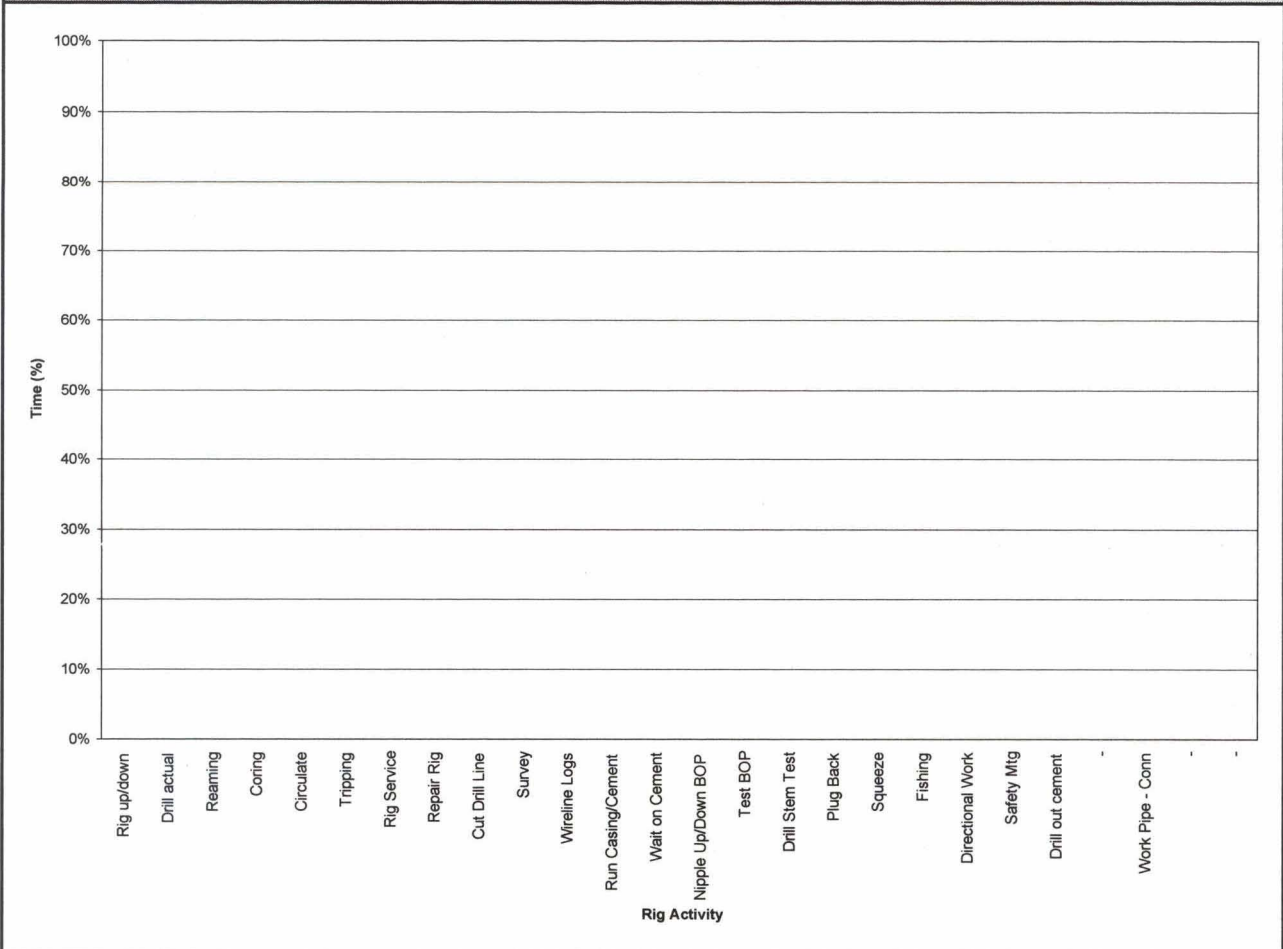
SLB_MWD-STD

**Italicized stations are NOT used in position calculations.*

Job Identification					
Operator:	Chevron Canada Resources	Location:	Chevron 3K-29 Pad	AFE Number:	RWWNC-R3004-400
Address:	112 - 4th Avenue S.W. Calgary, Alberta T4P 2V5	Area:	Fort Liard	Job Number:	40009921
		Province:	NWT	Lead DD:	Arlen Yakimchuk
Co. Rep:	Mike Bryson/Al Curtis/John Spears	Well Name:	Chevron et al Liard 3K-29	Night DD:	Clint Chase
Geologist:	Brock the rock	Field:	Liard	Lead MWD:	Paul Hardwick
Contractor:	Akita Drilling	Project ID:	Chevron 3K-29 Pad	Night MWD:	Jong Wan Yoo
Rig:	Akita #48	Pad ID:	Pad	Start Date:	January 10, 2004
Rig Manager:		Well ID:	Chevron et al Liard 3K-29	Release Date:	February 22, 2004
		Unique ID:	3K-29	Total Days	43

Well Specifications					
Kelly Bushing Height (from MSL):	416.90 m	Surface Location			
Ground Level (from MSL):	409.90 m	Section:		29	
Kelly Bushing to Ground Level:	7.00 m	North/South Coordinate:		690.47m S of N	
Magnetic Declination:	24.50 m	East/West Coordinate:		389.89m W of E	
Primary Target location (Ref from surface)		Actual Bottom Hole location (Ref from surface)			
North/-South:	-1719.57	North/-South:		-1724.72	
East/-West:	750.86	East/-West:		731.74	
True Vertical Depth:	2640.03	True Vertical Depth:		2642.39	
Target Radius:		Distance from Target Center:		15.09	

Time Analysis Chart



Project Description: Proposed

BHA # 1

This assembly was a slick assembly run with a 13 3/4" Bit and 9" Drill Collars which was run from surface to 225m at 2.5 degrees inclination and 257 degrees azimuth.

BHA # 2

This assembly was run with a 7.75" 7:8 XP National motor with a 12 1/4" J&L Insert Bit. The motor was set at 1.5 degrees and with 4 to 7 meter slides the well was turned to 177 degrees azimuth and 29 degrees azimuth at a depth of 778m, in 48.75 hrs of drilling. The assembly performed well but would have been more predictable with 9" monels instead of 6 3/4" Flex monels.

BHA # 3

This assembly was used to drill out the casing shoe and drill ahead. A 675 Power Drive unit with a 8 3/4" RSX162HDW Hycalog Bit. This assembly did not perform well due to the lack of flow and rotary RPM. The assembly was rotated at 88 RPM and flowed at 1200 L/min : The optimum RPM is 120 or higher and min flow is 1400 L/m. The assembly dropped severely in neutral which with the large stabilizer above the control unit was no surprise, and barely maintained with the flow bumped up to 1400 L/min in the last 20 meters of the run. But we had lost too much inclination to keep going with out checking the assembly. A DSX bit would probably have performed better with a smaller stabilizer and possibly a motor to keep the RPM up. The assembly was pulled at 831m MD where it had dropped to 24.4 degrees inclination from 29.7 degrees in 53m.

BHA # 4

This assembly was run with a 6 3/4" 7/8 5.0 XP Power Pak motor set @ 1.83 with a 220mm stabilizer and a 8 3/4" DSX 146GWJ Hycalog PDC bit this assembly did well drilling 1529m in 111.25hrs. This assembly was tripped after difficulty sliding with low ROP and multiple stalls. When examining the bit at surface the shoulder was quite damaged which probably contributed to our sliding problems. Bit IADC 322: 2 3 LT S X 1 CT BHA

BHA # 5

A fresh 6 3/4" 7/8 5.0 XP Power Pak motor was picked up and dialled up to 1.5 with a 8 3/4" TD51XY Reed bit This assembly did well maintaining the inclination at approximately 29 degrees and drilling 280m in 45 hrs. The assembly was pulled after slowing down and having a pressure spike. Bit IADC 537 : 3 CI NM F 2 BT PP

BHA # 6

Another fresh 6 3/4" 7/8 5.0 XP motor was picked up and set @ 1.83 with an 8 3/4" Smith FiODVPS Bit. This assembly turned the well to 147 degrees but wouldn't build and turn with full slides. It was pulled after 90.5m and 16.5 hrs. The bit's gauge was rounded off probably contributing to the lack of response. Bit IADC 537 : 2 4 FC A E 1 RG BHA

BHA # 7

The same motor was dialled up to 2.12 and rerun with a 8 3/4" Reed TD53AM Bit. This assembly responded well building with 6 degree and then 9 degree doglegs before we tripped out to dial down to 1.83.
Bit IADC 537 : 1 2 CT H E 0 - BHA

BHA # 8

A fresh 6 3/4" 7/8 5.0 XP motor was picked up and set at 1.83 degrees with a Smith Fi31VPS Bit. This assembly finished building and turning the well to 68.5 Degrees Inclination and 154 Degrees azimuth. Before being pulled for casing point at 2912m it drilled 132.5m in 22.5 hrs. Bit IADC 537 : 2 4 FC A E 1 RG TD

BHA # 9

A 4 3/4" 7/8 5.0 stabilized Wenzel motor set @ 1.5 degrees was run with a DSX 146HGJW bit. This assembly performed very well building up to 89 Degrees and turning to 125 degrees azimuth. Then holding the inclination and azimuth till we were guaranteed the final target and the azimuth was left to wander while we maintained the azimuth. The well was called short at 3700m at a TVD of 2642.39m approximately 15m from the proposed plan. This assembly drilled 788m in 100.5hrs.

CFS 13.8

Job Information															
Company:		Chevron Canada Resources		Location:		3K-29		AFE Number:		RWWNC-R3004-00					
Well Name:		Chevron et al Liard 3K-29		Rig:		Akita #48		Job Number:		40009921					
Run Data															
Date In:		#REF!		Casing Depth:				PDM Run #:		1					
Date Out:				Bit to Survey:				Motor Make:		Ppak					
Days:				Inc. In:				R/S config:		7/8 3.8					
Hole Size:		349.0 mm		Azim. In:				ABH Setting:		1.50"					
Depth In:		0.0 m		Inc. Out:				Motor RPM:		120					
Depth Out:		225.0 m		Azim. Out:				Reactive:							
Meters Drilled:		225.0 m		SPP Off:				Slide Dist:							
Drilling Hrs:				SPP On:				Rotate Dist:							
Circ. Hrs:				Differential:				Slide Hrs:							
Tot. Drill & Circ:				Average WOB:				Rotary Hrs:							
Average ROP:				Rotary RPM:				Liner Size:							
Inverse ROP:				Rotary Torque:				Strokes/min:							
BHA Weight:		P/U Weight:		% Steering:				Vol/Stroke:		0.0093					
String Weight:		S/O Weight:		% Rotary:				Volume:		#VALUE!					
								Pump Information:							
				Pump Man:				National		Pump Man:		National			
				Pump Type:				10-P-130		Pump Type:				10-P-130	
				Tri/Duplex:				Triplex		Tri/Duplex:				Triplex	
				Stroke Length:				254.0 mm		Stroke Length:				254.0 mm	
				Liner Size:				152 mm		Liner Size:				152 mm	
				Strokes/min:				52		Strokes/min:				52	
				Vol/Stroke:				0.0167		Vol/Stroke:				0.0167	
				Volume:				0.87 m3/min		Volume:				0.87 m3/min	

Motor Pre Run Checks	Motor Post Run Checks
Pre Run motor checks performed as per Checklist CGT-D&M-6.3-FRM-002	Post Run motor checks performed as per Checklist CGT-D&M-6.3-FRM-002
Yes ☒ No ☐	Yes ☒ No ☐

Mud Data											
Mud Type:	0	Mud Vis:	0	Chlorides:	0	YP:	0	Sand:	0	Oil/Water:	0
Mud Wt:	0	Water Loss:	0	Solid cont:	0	PV:	0	pH:	0	MWD Temp:	0

[illegible]

Performance Summary			Bit Grading							
Expected: 7 to 10		Bit IADC Code	Cutting Structure							
Actual:			Inner Rows	Outer Rows	MDC	LOC	Bearing	Gauge mm	ODC	RP

Comments:									
2 7/8"	1,650 ft-lbf	2,240 N.m	n/a	n/a	1,700 ft-lbf	2,304 N.m	2 3/8 Reg	3,000 ft-lbf	4,065 N.m
3 1/8" Standard	1,700 ft-lbf	2,300 N.m	n/a	n/a	2,500 ft-lbf	3,388 N.m	"	"	"
3 1/8" XF	1,800 ft-lbf	2,430 N.m	n/a	n/a	2,500 ft-lbf	3,388 N.m	"	"	"
3 1/2"	3,500 ft-lbf	4,750 N.m	n/a	n/a	4,000 ft-lbf	5,420 N.m	2 7/8 Reg	6,000 ft-lbf	8,130 N.m
3 3/4"	4,500 ft-lbf	6,100 N.m	n/a	n/a	6,000 ft-lbf	8,130 N.m	"	"	"
4 3/4"	10,000 ft-lbf	13,560 N.m	4,000 ft-lbf	5,420 N.m	11,000 ft-lbf	14,905 N.m	3 1/2 Reg	8,000 ft-lbf	10,840 N.m
5"	11,500 ft-lbf	15,590 N.m	n/a	n/a	11,000 ft-lbf	14,905 N.m	"	"	"
6 1/4"	25,000 ft-lbf	33,900 N.m	10,000 ft-lbf	13,550 N.m	25,000 ft-lbf	33,875 N.m	4 1/2 Reg	14,000 ft-lbf	18,970 N.m
6 3/4"	28,000 ft-lbf	33,900 N.m	10,000 ft-lbf	13,550 N.m	28,000 ft-lbf	37,940 N.m	"	"	"
7"	28,000 ft-lbf	37,960 N.m	10,000 ft-lbf	13,550 N.m	28,000 ft-lbf	37,940 N.m	"	"	"
86 "	35,000 ft-lbf	47,450 N.m	23,000 ft-lbf	31,165 N.m	35,000 ft-lbf	47,425 N.m	6 5/8 Reg	30,000 ft-lbf	40,650 N.m
9 5/8"	60,000 ft-lbf	81,350 N.m	37,000 ft-lbf	50,135 N.m	60,000 ft-lbf	81,300 N.m	7 5/8 Reg	37,000 ft-lbf	50,135 N.m
11 1/4"	85,000 ft-lbf	115,240 N.m	37,000 ft-lbf	50,135 N.m	85,000 ft-lbf	115,175 N.m	"	"	"

Torque Specifications (NOTE: Below torques are for steel, use 80% for monels)									
Cnxn	Imperial	Metric	Cnxn	Imperial	Metric	Cnxn	Imperial	Metric	Bit
2 3/8" VO55	3,300 ft-lbf	4,472 N.m	PH6	5,500 ft-lbf	7,453 N.m	5" H90	29,400 ft-lbf	39,837 N.m	1
2 7/8" VO55	3,800 ft-lbf	5,149 N.m	3 1/2" IF	10,000 ft-lbf	13,550 N.m	4 1/2" XH	23,000 ft-lbf	31,165 N.m	
2 7/8" AOH	3,500 ft-lbf	4,743 N.m	4" FH	15,000 ft-lbf	20,325 N.m	6 5/8" Reg	46,000 ft-lbf	62,330 N.m	
2 7/8" H90	4,600 ft-lbf	6,233 N.m	4 1/2" H90	23,000 ft-lbf	31,165 N.m	7 H90	63,000 ft-lbf	85,365 N.m	



BHA Report

BHA # 2

Job Information

Run Data

Motor Pre Run Checks	
----------------------	--

Pre Run motor checks performed as per Checklist CGT-D&M-6.3-FRM-002

Motor Post Run Checks	
-----------------------	--

Post Run motor checks performed as per Checklist CGT-D&M-6.3-FRM-002

Yes ☒ No ☐

Yes ☒ No ☐

Mud Data

BHA Description	Frequency	Severity	Prevalence	Notes
1. Headache	Common	Mild to Moderate	10-15%	Often associated with stress or fatigue.
2. Nausea	Occasional	Mild	5-10%	May be related to medication or diet.
3. Dizziness	Occasional	Mild to Moderate	8-12%	Can be exacerbated by rapid movements.
4. Fatigue	Common	Mild	12-18%	Often occurs after prolonged use of the device.
5. Skin Irritation	Occasional	Mild	3-7%	Usually occurs at the point of contact with the device.
6. Changes in Vision	Rare	Mild to Moderate	1-3%	Should be reported immediately to a healthcare provider.
7. Allergic Reactions	Very Rare	Severe	<1%	Requires immediate medical attention.

BHA Description	Frequency	Severity	Prevalence	Notes
1. Headache	Common	Mild to Moderate	10-15%	Often associated with stress or fatigue.
2. Nausea	Occasional	Mild	5-10%	May be related to medication or diet.
3. Dizziness	Occasional	Mild to Moderate	8-12%	Can be exacerbated by rapid movements.
4. Fatigue	Common	Mild	12-18%	Often occurs after prolonged use of the device.
5. Skin Irritation	Occasional	Mild	3-7%	Usually occurs at the point of contact with the device.
6. Changes in Vision	Rare	Mild to Moderate	1-3%	Should be reported immediately to a healthcare provider.
7. Allergic Reactions	Very Rare	Severe	<1%	Requires immediate medical attention.

Performance Summary	
---------------------	--

Bit Grading	
-------------	--

Comments:

Torque Specifications (NOTE: Below torques are for steel, use 80% for monels)

Cnxn	Imperial	Metric	Cnxn	Imperial	Metric	Cnxn	Imperial	Metric	Bit
2 3/8" VO55	3,300 ft-lbf	4,472 N.m	PH6	5,500 ft-lbf	7,453 N.m	5" H90	29,400 ft-lbf	39,837 N.m	2
2 7/8" VO55	3,800 ft-lbf	5,149 N.m	3 1/2" IF	10,000 ft-lbf	13,550 N.m	4 1/2" XH	23,000 ft-lbf	31,165 N.m	
2 7/8" AOH	3,500 ft-lbf	4,743 N.m	4" FH	15,000 ft-lbf	20,325 N.m	6 5/8 Reg	46,000 ft-lbf	62,330 N.m	
2 7/8" H90	4,600 ft-lbf	6,233 N.m	4 1/2" H90	23,000 ft-lbf	31,165 N.m	7 H90	63,000 ft-lbf	85,365 N.m	

Job Information		Company: Chevron Canada Resources		Location: 3K-29		AFE Number: RWWNC-R3004-400	
Well Name: Chevron et al Liard 3K-29		Rig: Akita #48				Job Number: 40009921	
Run Data							
Date In: January 23, 2004	Casing Depth: 778.0 m	PDM Run #: 1	Company Rep: Mike Breght/Curtis/John Speers	Rig Manager:			
Date Out: January 25, 2004	Bit to Survey: 16.5 m	Motor Make: Ppak	Lead DD: Arlen Yakimchuk	Lead MWD: Paul Hardwick			
Days: 2	Inc. In: 0.00°	R/S config: 7/8 3.8	Alternate:	Alternate:			
Hole Size: 222.0 mm	Azm. In: 0.00°	ABH Setting: 1.50°	Night DD: Clint Chase	Night MWD: Jon Yon Woo			
Depth In: 778.0 m	Inc. Out: 29.70°	Motor RPM: 164.9652	Alternate:	Alternate:			
Depth Out: 831.7 m	Azm. Out: 173.00°	Reactive:	Pump Information:				
Meters Drilled: 53.7 m	SPP Off: 10000 kPa	Slide Dist:	Pump Man: National	Pump Man: National			
Drilling Hrs: 4.50 hrs	SPP On: 10000 kPa	Rotate Dist: 53.00 m	Pump Type: 10-P-130	Pump Type: 10-P-130			
Circ. Hrs: 4.25 hrs	Differential: 0 kPa	Slide Hrs:	Tri/Duplex: Triplex	Tri/Duplex: Triplex			
Tot. Drill & Circ: 8.75 hrs	Average WOB: 8.5 kDaN	Rotary Hrs: 4.50 hrs	Stroke Length: 254.0 mm	Stroke Length: 254.0 mm			
Average ROP: 11.9 m/hr	Rotary RPM: 90	Slide ROP:	Liner Size: 152 mm	Liner Size: 152 mm			
Inverse ROP: 5.0 min/m	Rotary Torque: 10000 ft-lbs	Rotary ROP: 11.8 m/hr	Strokes/min: 86	Strokes/min: 86			
BHA Weight:	P/U Weight: 61.0 kDaN	% Steering:	Vol/Stroke: 0.0139	Vol/Stroke: 0.0139			
String Weight: 51.0 kDaN	S/O Weight: 58.0 kDaN	% Rotary: 100%	Volume: 1.20 m3/min	Volume: 1.20 m3/min			

Motor Pre Run Checks

Pre Run motor checks performed as per Checklist CGT-D&M-6.3-FRM-002

Yes ☒ No ☐**Motor Post Run Checks**

Post Run motor checks performed as per Checklist CGT-D&M-6.3-FRM-002

Yes ☒ No ☐

Mud Data		Mud Type: Invert		Mud Vis: 0	Chlorides: 0	YP: 0	Sand: 0	Oil/Water: 0
Mud Wt: 1060		Water Loss: 0	Solid cont: 0	PV: 0	pH: 0	MWD Temp: 22.5		

BHA Description

Item	Description	Vendor	Serial No.	ID	OD	Max OD	FN	Conxn Dn	Conxn Up	Length	Cum. Length
1	8 3/4" RSX 162HDW (2x11)(4X12)	REED	204281			222			4 1/2 Reg	0.25	0.25
2	PD 675 Bias Unit	Schlumberger	BU-60103		178	222		4 1/2 Reg	4 1/2 IF	0.71	0.96
3	PD 675 Extension Sub	Schlumberger	ES-60156		172	172		4 1/2 IF	4 1/2 IF	0.32	1.28
4	PD 675 Control Collar (CU-00229)	Schlumberger	CC-60046		172	172		4 1/2 IF	4 1/2 IF	3.01	4.29
5	6 3/4" Stabilizer	National	SS-75-111	73	173	200	.52/ 97	4 1/2 IF	4 1/2 IF	1.16	5.45
6	6 3/4" Cross Over Sub	Schlumberger	1216573	76	162	162		4 1/2 IF	5 H90	0.31	5.76
7	6 3/4" NM Float Sub	Schlumberger	2317102	73	170	170		5 H90	5 H90	0.79	6.55
8	6 3/4" NM UBHO S	Schlumberger	3417105	72	165	165		5 H90	5 H90	0.71	7.26
9	6 3/4" Flex Monel	Marlex	C6646300316	73	171	171	121	5 H90	5 H90	9.45	16.71
10	6 3/4" Flex Monel	Marlex	C6646300317	73	171	171	121	5 H90	5 H90	9.45	26.16
11	5 X 7" D C	AKITA		71	178	178		5 H90	5 H90	47.67	73.83
12	7" Jars	Smith	110570	72	179	179	122	5 H90	5 H90	9.61	83.44
13	4 X 7" DC	AKITA		71	178	178		5 H90	5 H90	38.34	121.78
14	X/O	AKITA		57	171	171		5 H90	4.5 IF	1.22	123.00
15	21 X 5" HWDP	AKITA						4.5 IF	4.5 IF	195.19	318.19
16	5" DP to Surface	AKITA						4.5 IF	4.5 IF		

Performance Summary

Expected: 8

Actual: 0

Bit Grading**Cutting Structure**

Inner Rows	Outer Rows	MDC	LOC	Bearing	Gauge mm	ODC	RP
1	1	-	A	X	0	-	DTF

Comments: BHA Failed to build tripped out

2 7/8"	1,650 ft-lbf	2,240 N.m	n/a	n/a	1,700 ft-lbf	2,304 N.m	2 3/8 Reg	3,000 ft-lbf	4,065 N.m
3 1/8" Standard	1,700 ft-lbf	2,300 N.m	n/a	n/a	2,500 ft-lbf	3,388 N.m	"	"	"
3 1/8" XF	1,800 ft-lbf	2,430 N.m	n/a	n/a	2,500 ft-lbf	3,388 N.m	"	"	"
3 1/2"	3,500 ft-lbf	4,750 N.m	n/a	n/a	4,000 ft-lbf	5,420 N.m	2 7/8 Reg	6,000 ft-lbf	8,130 N.m
3 3/4"	4,500 ft-lbf	6,100 N.m	n/a	n/a	6,000 ft-lbf	8,130 N.m	"	"	"
4 3/4"	10,000 ft-lbf	13,560 N.m	4,000 ft-lbf	5,420 N.m	11,000 ft-lbf	14,905 N.m	3 1/2 Reg	8,000 ft-lbf	10,840 N.m
5"	11,500 ft-lbf	15,590 N.m	n/a	n/a	11,000 ft-lbf	14,905 N.m	"	"	"
6 1/4"	25,000 ft-lbf	33,900 N.m	10,000 ft-lbf	13,550 N.m	25,000 ft-lbf	33,875 N.m	4 1/2 Reg	14,000 ft-lbf	18,970 N.m
6 3/4"	28,000 ft-lbf	37,960 N.m	10,000 ft-lbf	13,550 N.m	28,000 ft-lbf	37,940 N.m	"	"	"
7"	28,000 ft-lbf	37,960 N.m	10,000 ft-lbf	13,550 N.m	28,000 ft-lbf	37,940 N.m	"	"	"
8"	35,000 ft-lbf	47,450 N.m	23,000 ft-lbf	31,165 N.m	35,000 ft-lbf	47,425 N.m	6 5/8 Reg	30,000 ft-lbf	40,650 N.m
9 5/8"	60,000 ft-lbf	81,350 N.m	37,000 ft-lbf	50,135 N.m	60,000 ft-lbf	81,300 N.m	7 5/8 Reg	37,000 ft-lbf	50,135 N.m
11 1/4"	85,000 ft-lbf	115,240 N.m	37,000 ft-lbf	50,135 N.m	85,000 ft-lbf	115,175 N.m	"	"	"

Torque Specifications (NOTE: Below torques are for steel, use 80% for monels)

Cnxn	Imperial	Metric	Cnxn	Imperial	Metric	Cnxn	Imperial	Metric	Bit
2 3/8" VO55	3,300 ft-lbf	4,472 N.m	PH6	5,500 ft-lbf	7,453 N.m	5" H90	29,400 ft-lbf	39,837 N.m	3
2 7/8" VO55	3,800 ft-lbf	5,149 N.m	3 1/2" IF	10,000 ft-lbf	13,550 N.m	4 1/2" XH	23,000 ft-lbf	31,165 N.m	
2 7/8" AOH	3,500 ft-lbf	4,743 N.m	4" FH	15,000 ft-lbf	20,325 N.m	6 5/8 Reg	46,000 ft-lbf	62,330 N.m	
2 7/8" H90	4,600 ft-lbf	6,233 N.m	4 1/2" H90	23,000 ft-lbf	31,165 N.m	7 H90	63,000 ft-lbf	85,365 N.m	

CGT-D/M-6.5-FRM-004 Rev2

CGT-D/M-6 5-FRM-004 Rev2



BHA # 6

Torque Specifications (NOTE: Below torques are for steel, use 80% for monels)									
Cnxn	Imperial	Metric	Cnxn	Imperial	Metric	Cnxn	Imperial	Metric	Bit
2 3/8" VO55	3,300 ft-lbf	4,472 N.m	PH6	5,500 ft-lbf	7,453 N.m	5" H90	29,400 ft-lbf	39,837 N.m	6
2 7/8" VO55	3,800 ft-lbf	5,149 N.m	3 1/2" IF	10,000 ft-lbf	13,550 N.m	4 1/2" XH	23,000 ft-lbf	31,165 N.m	
2 7/8" AOH	3,500 ft-lbf	4,743 N.m	4" FH	15,000 ft-lbf	20,325 N.m	6 5/8 Reg	46,000 ft-lbf	62,330 N.m	
2 7/8" H90	4,600 ft-lbf	6,233 N.m	4 1/2" H90	23,000 ft-lbf	31,165 N.m	7 H90	63,000 ft-lbf	85,365 N.m	

Job Information				Location: 3K-29				AFE Number: RWWNC-R3004-400			
Company: Chevron Canada Resources				Rig: Akita #48				Job Number: 40009921			
Well Name: Chevron et al Liard 3K-29											
Run Data											
Date In:	February 5, 2004	Casing Depth:	774.0 m	PDM Run #:	2	Company Rep:	Mike Bryson/H Contract/John Spence	Rig Manager:			
Date Out:	February 6, 2004	Bit to Survey:	17.4 m	Motor Make:	Ppak	Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick		
Days:	5	Inc. In:	30.30°	R/S config:	7/8 5.0	Alternate:		Alternate:			
Hole Size:	222.0 mm	Azm. In:	149.00°	ABH Setting:	2.12°	Night DD:	Clint Chase	Night MWD:	Jong Wan Yoo		
Depth In:	2731.5 m	Inc. Out:	40.90°	Motor RPM:	110	Alternate:		Alternate:			
Depth Out:	2779.7 m	Azm. Out:	147.80°	Reactive:	270°	Pump Information:					
Meters Drilled:	48.2 m	SPP Off:	10800 kPa	Slide Dist:	48.00 m	Pump Man:	National	Pump Man:	National		
Drilling Hrs:	6.00 hrs	SPP On:	12500 kPa	Rotate Dist:	0.00 m	Pump Type:	10-P-130	Pump Type:	10-P-130		
Circ. Hrs:	2.25 hrs	Differential:	1700 kPa	Slide Hrs:	6.00 hrs	Tri/Duplex:	Triplex	Tri/Duplex:	Triplex		
Tot. Drill & Circ:	8.25 hrs	Average WOB:	20.0 kDaN	Rotary Hrs:	0.00 hrs	Stroke Length:	254.0 mm	Stroke Length:	254.0 mm		
Average ROP:	8.0 m/hr	Rotary RPM:	n/a	Slide ROP:	8.0 m/hr	Liner Size:	152 mm	Liner Size:	152 mm		
Inverse ROP:	7.5 min/m	Rotary Torque:	n/a	Rotary ROP:	#DIV/0!	Strokes/min:	107	Strokes/min:	108		
BHA Weight:	33.0 kDaN	P/U Weight:	145.0 kDaN	% Steering:	100%	Vol/Stroke:	0.0139	Vol/Stroke:	0.0139		
String Weight:	110.0 kDaN	S/O Weight:	90.0 kDaN	% Rotary:	0%	Volume:	1.49 m3/min	Volume:	1.50 m3/min		
Motor Pre Run Checks						Motor Post Run Checks					
Pre Run motor checks performed as per Checklist CGT-D&M-6.3-FRM-002						Post Run motor checks performed as per Checklist CGT-D&M-6.3-FRM-002					
Yes ☒ No ☐						Yes ☒ No ☐					
Mud Data											
Mud Type:	Invert	Mud Vis:	48	Chlorides:	27000	YP:	2.9	Sand:	0	Oil/Water:	88.7/11.3
Mud Wt:	1065	Water Loss:	30	Solid cont:	9.8	PV:	8	pH:	0	MWD Temp:	99
BHA Description											
Item	Description	Vendor	Serial No.	ID	OD	Max OD	FN	Conxn Dn	Conxn Up	Length	Cum. Length
1	8 3/4" TD53AM	REED	L54361			222			4 1/2 Reg	0.25	0.25
2	6 3/4" 7/8 5.0 XP set @ 2.12	Schlumberger	675A -24-3528	73	170	190		5 H90	5 H90	7.83	8.08
3	6 3/4 Ponei Monel	Marlex	C650102676	72	125/163	163	2.01	5 H90	5 H90	2.93	11.01
4	6 3/4" NM Float Sub	Schlumberger	2317102	73	165	170		5 H90	5 H90	0.79	11.80
5	6 3/4" NM UBHO S	Schlumberger	3417105	72	165	165		5 H90	5 H90	0.71	12.51
6	6 3/4" Flex Monel	Marlex	C6646300316	73	171	171	121	5 H90	5 H90	9.45	21.96
7	6 3/4" Flex Monel	Marlex	C6646300317	73	171	171	121	5 H90	5 H90	9.45	31.41
8	7" Jars	Smith	110570	72	179	179	122	5 H90	5 H90	9.61	41.02
9	X/O	AKITA		57	171	171		5 H90	4.5 IF	1.22	42.24
10	27 X 5" HWDP	AKITA						4.5 IF	4.5 IF	250.98	293.22
11	5" DP to Surface	AKITA						4.5 IF	4.5 IF		
Performance Summary											
Expected: 9			Bit IADC Code		Cutting Structure		Bearing		Gauge	ODC	RP
Actual: 0			537		1 2 CT H		E		0	-	BHA
Comments: Hold inc with turn to the left with full slides high side											
Torque Specifications (NOTE: Below torques are for steel, use 80% for monels)											
Cnxn	Imperial	Metric	Cnxn	Imperial	Metric	Cnxn	Imperial	Metric	Bit		
2 7/8"	1,650 ft-lbf	2,240 N.m	n/a	n/a	1,700 ft-lbf	2,304 N.m	2 3/8 Reg	3,000 ft-lbf	4,065 N.m		
3 1/8" Standard	1,700 ft-lbf	2,300 N.m	n/a	n/a	2,500 ft-lbf	3,388 N.m	"	"	"		
3 1/8" XF	1,800 ft-lbf	2,430 N.m	n/a	n/a	2,500 ft-lbf	3,388 N.m	"	"	"		
3 1/2"	3,500 ft-lbf	4,750 N.m	n/a	n/a	4,000 ft-lbf	5,420 N.m	2 7/8 Reg	6,000 ft-lbf	8,130 N.m		
3 3/4"	4,500 ft-lbf	6,100 N.m	n/a	n/a	6,000 ft-lbf	8,130 N.m	"	"	"		
4 3/4"	10,000 ft-lbf	13,580 N.m	4,000 ft-lbf	5,420 N.m	11,000 ft-lbf	14,905 N.m	3 1/2 Reg	8,000 ft-lbf	10,840 N.m		
5"	11,500 ft-lbf	15,590 N.m	n/a	n/a	11,000 ft-lbf	14,905 N.m	"	"	"		
6 1/4"	25,000 ft-lbf	33,900 N.m	10,000 ft-lbf	13,550 N.m	25,000 ft-lbf	33,875 N.m	4 1/2 Reg	14,000 ft-lbf	18,970 N.m		
6 3/4"	28,000 ft-lbf	37,900 N.m	10,000 ft-lbf	13,550 N.m	28,000 ft-lbf	37,940 N.m	"	"	"		
7"	28,000 ft-lbf	37,960 N.m	10,000 ft-lbf	13,550 N.m	28,000 ft-lbf	37,940 N.m	"	"	"		
66 "	35,000 ft-lbf	47,450 N.m	23,000 ft-lbf	31,165 N.m	35,000 ft-lbf	47,425 N.m	6 5/8 Reg	30,000 ft-lbf	40,650 N.m		
9 5/8"	60,000 ft-lbf	81,350 N.m	37,000 ft-lbf	50,135 N.m	60,000 ft-lbf	81,300 N.m	7 5/8 Reg	37,000 ft-lbf	50,135 N.m		
11 1/4"	85,000 ft-lbf	115,240 N.m	37,000 ft-lbf	50,135 N.m	85,000 ft-lbf	115,175 N.m	"	"	"		
Torque Specifications (NOTE: Below torques are for steel, use 80% for monels)											
Cnxn	Imperial	Metric	Cnxn	Imperial	Metric	Cnxn	Imperial	Metric	Bit		
2 3/8" VO55	3,300 ft-lbf	4,472 N.m	PH6	5,500 ft-lbf	7,453 N.m	5" H90	29,400 ft-lbf	39,837 N.m	7		
2 7/8" VO55	3,800 ft-lbf	5,149 N.m	3 1/2" IF	10,000 ft-lbf	13,550 N.m	4 1/2" XH	23,000 ft-lbf	31,165 N.m			
2 7/8" AOH	3,500 ft-lbf	4,743 N.m	4" FH	15,000 ft-lbf	20,325 N.m	6 5/8 Reg	46,000 ft-lbf	62,330 N.m			
2 7/8" H90	4,600 ft-lbf	6,233 N.m	4 1/2" H90	23,000 ft-lbf	31,165 N.m	7 H90	63,000 ft-lbf	85,365 N.m			

CGT-D/M-6.5-FRM-004 Rev2

CGT-D/M-6.5-FRM-004:Rev2



January 11, 2004

CGT-DM-6.5-FRM-003 Rev3



Drilling and Measurements

Daily Service Report

January 12, 2004

Job Information										Day 3	
Company: Chevron Canada Resources				Location: 3K-29				AFE Number:			
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921			
Drilling Record		Time Record				Cost Estimate					
Bit Number	1	Hrs	From	To	Code	Description	Description	Unit	Price	Cost	
Bit Size	311 mm	24.00	0.00	0.00		Standby	DD Supervision	2 @	\$775	\$1,550.00	
Bit Type							MWD Supervision	2 @	\$575	\$1,150.00	
Jets (mm)							PowerDrive Flat Rate		\$28,000		
TFA (mm2)							Flat Rate Operating		\$8,700		
Depth In							Hourly Rate		\$550		
Depth Out							Gamma Ray Operating		\$950		
Meters							Gamma Ray Standby		\$0		
Hours	#REF!						E-Pulse Operating				
ROP (m/hr)	#REF!						E-Pulse Standby				
RPM							Slimpulse MWD Monitoring		\$3,500		
WOB							Slimpulse Standby		n/c		
PP On							APWD Operating				
PP Off							XP/AD motor premium	0.00 @	\$30	\$0.00	
String Weight							Trucking Ticket No.				
PU Weight											
SO weight											
Pump Data						Tool Failure Credit					
Manufacturer						-					
Model						Thread Inspection					
Tri/Duplex						\$31					
Liner Size						Motor Thread Inspection					
Stroke Length						\$300					
M3/Stroke	0.0093	0.0167	Total Hrs		24.00	Motor Reline * \$US					
Stroke Rate			Comments			Substance					
Volume	0	0				\$75					
Mud Record						Kilometers Today					
Type						200 @ \$0.85 \$170.00					
Weight						Vehicle Plate #s					
Viscosity						VTE 581 YRA 333					
Water Loss						Daily Total \$2,870.00					
pH						YWJ 580 Accumulated \$11,590.00					
Sand											
Temperature											
BHA # #REF!		BHA #				Wellsite Inventory					
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number	
								8" PDM	National OilW	3111-80016	
								8" PDM	National OilW	775-77197-24	
								7.75" PDM	National OilW	775-77198-24	
								8" Bell Sub	Schlumberge	1220360	
								8" Bell Sub	Schlumberge	3217100	
								6.75" NM Float Sub	Schlumberge	2317102	
								6.75" NM Float Sub	Schlumberge	2317106	
								6.75" NM UBHO	Schlumberge	2417113	
								6.75" NM UBHO	Schlumberge	3417105	
								6.75" Flex Monel	Marlex	30-0316	
								6.75" Flex Monel	Marlex	30-0317	
								6.75" Flex Pony Monel	Marlex	2676	
								6.75" Flex Pony Monel	Marlex	9147	
								6.75" X/O	Schlumberge	1217136	
								6.75" X/O	Schlumberge	2217154	
								6.75" X/O	Schlumberge	1215902	
								6.75" X/O	Schlumberge	2217106	
									Schlumberge	11622R	
									Schlumberge	5905H90	
									Schlumberge	N5662R	
									Schlumberge	1405H90	
									National OilW		
									National OilW		
Total Length		Total Length									
Personnel											
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man:	Mike Berg	Phone No: 1-403-699-2886					
Alternate:		Alternate:									
Night DD:	Clint Chase	Night MWD:	Jon Yon Woo								
Alternate:		Alternate:									
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature							



Drilling and Measurements

Daily Service Report

January 13, 2004

Job Information										Day 4		
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400				
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921				
Drilling Record		Time Record				Cost Estimate						
Bit Number	1	Hrs	From	To	Code	Description	Description	Unit	Price	Cost		
Bit Size	349 mm	24.00	0.00	0.00		Standby	DD Supervision	2 @	\$775	\$1,550.00		
Bit Type							MWD Supervision	2 @	\$575	\$1,150.00		
Jets (mm)							PowerDrive Flat Rate		\$28,000			
TFA (mm2)							Flat Rate Operating		\$8,700			
Depth In							Hourly Rate		\$550			
Depth Out							Gamma Ray Operating		\$950			
Meters							Gamma Ray Standby		\$0			
Hours	#REF!						E-Pulse Operating					
ROP (m/hr)	#REF!						E-Pulse Standby					
RPM							Slimpulse MWD Monitoring		\$3,500			
WOB							Slimpulse Standby		n/c			
PP On							APWD Operating					
PP Off							XPIAD motor premium	0.00 @	\$30	\$0.00		
String Weight							Trucking Ticket No.					
PU Weight												
SO weight												
Pump Data						Tool Failure Credit					-\$350	
Manufacturer						Thread Inspection					\$31	
Model						Motor Thread Inspection					\$300	
Tri/Duplex						Motor Reline * \$US						
Liner Size						Subsistence					\$75	
Stroke Length						Kilometers Today					200 @ \$0.85 \$170.00	
M3/Stroke	0.0093	0.0167	Total Hrs		24.00	Vehicle Plate #s						
Stroke Rate						VTE 581					YRA 333	
Volume	0	0					YVJ 580					Daily Total \$2,870.00
Mud Record											Accumulated \$14,460.00	
Type						Downhole Motor Record					Jars	
Weight		Run	Vendor	Serial Number		Daily	Run	Well	Hours	Serial Number		
Viscosity						Circ	Drill	Total	Circ	Drill	Total	
Water Loss		1	SLB			0.00	0.00	0.00	#REF!	#REF!	#REF!	
pH									#REF!	#REF!	#REF!	
Sand												
Temperature												
BHA # #REF!						BHA #				Wellsite Inventory		
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number		
13 3/4" JO3XTC09	R.B.I	XO3140684	0.32					8" PDM	National OilW	3111-80016		
Bit Sub			0.90					8" PDM	National OilW	775-77197-24		
D.C			17.47					7.75" PDM	National OilW	775-77198-24		
								8" Bell Sub	Schlumberge	1220360		
								8" Bell Sub	Schlumberge	3217100		
								6.75" NM Float Sub	Schlumberge	2317102		
								6.75" NM Float Sub	Schlumberge	2317106		
								6.75" NM UBHO	Schlumberge	2417113		
								6.75" NM UBHO	Schlumberge	3417105		
								6.75" Flex Monel	Marlex	30-0316		
								6.75" Flex Monel	Marlex	30-0317		
								6.75" Flex Pony Monel	Marlex	2676		
								6.75" Flex Pony Monel	Marlex	9147		
								6.75" X/O	Schlumberge	1217136		
								6.75" X/O	Schlumberge	2217154		
								6.75" X/O	Schlumberge	1215902		
								6.75" X/O	Schlumberge	2217106		
									Schlumberge	11622R		
									Schlumberge	5905H90		
									Schlumberge	N5662R		
									Schlumberge	1405H90		
									National OilW			
									National OilW			
Total Length				18.69	Total Length							
Personnel												
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man:	Mike Berg	Phone No:	1-403-699-2886					
Alternate:		Alternate:										
Night DD:	Clint Chase	Night MWD:	Jon Yon Woo									
Alternate:		Alternate:										
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature								

Job Information										Day 5	
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400			
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921			
Drilling Record		Time Record				Cost Estimate					
Bit Number	1	Hrs	From	To	Code	Description	Description	Unit	Price	Cost	
Bit Size	349 mm	0.25	0:00	0:15	10	Wireline survey	DD Supervision	2 @	\$775	\$1,550.00	
Bit Type		2.25	0:15	2:30	2	Drill From 80m to 84m	MWD Supervision	2 @	\$575	\$1,150.00	
Jets (mm)	4 X 20	1.25	2:30	3:45	22	Work on top Drive	PowerDrive Flat Rate		\$28,000		
TFA (mm2)	#VALUE!	2.50	3:45	6:15	2	Drill From 84m to 91m	Flat Rate Operating		\$8,700		
Depth In	80.00	0.25	6:15	6:30	7	Rig Service	Hourly Rate		\$550		
Depth Out	170.00	1.50	6:30	8:00	2	Drill From 91m to 94m	Gamma Ray Operating		\$950		
Meters	90.00	0.75	8:00	8:45	2	Drill From 94m to 99m	Gamma Ray Standby		\$0		
Hours	17.75	0.50	8:45	9:15	22	Work on top Drive	E-Pulse Operating				
ROP (m/hr)	5.07	5.00	9:15	14:15	2	Drill From 99m to 118m	E-Pulse Standby				
RPM	90	0.25	14:15	14:30	10	Survey	Slimpulse MWD Monitoring		\$3,500		
WOB	10	0.50	14:30	15:00	7	Rig Service	Slimpulse Standby		n/c		
PP On	4200	1.00	15:00	16:00	2	Drill From 118m to 124m	APWD Operating				
PP Off	4100	0.25	16:00	16:15	23	H2S Drill	XPIAD motor premium		\$30		
String Weight	35.0	3.75	16:15	20:00	2	Drill From 124m to 157m	Trucking Ticket No.				
PU Weight		0.25	20:00	20:15	21	Safety Meeting					
SO weight		2.00	20:15	22:15	5	Work on top Drive					
Pump Data		0.25	22:15	22:30	7	Rig Service	Tool Failure Credit		-\$350		
Manufacturer	National	National	0.25	22:30	22:45	10	Dev survey				
Model	10-P-130	10-P130	0.75	22:45	23:30	2	Drill From 157m to 167m	Thread Inspection		\$31	
Tri/Duplex	tri	tri	0.25	23:30	23:45	10	Dev survey	Motor Thread Inspection		\$300	
Liner Size			0.25	23:45	0:00	2	Drill From 167m to 170m	Motor Reline * \$US			
Stroke Length	254	254	Total Hrs			24.00					
M3/Stroke	0.0093	0.0167						Kilometers Today	200 @	\$0.85	\$170.00
Stroke Rate	80	80						Vehicle Plate #'s			
Volume	0.744	1.336						VTE 581	YRA 333	Daily Total	\$2,870.00
Mud Record								YVJ 580		Accumulated	\$17,330.00
Type	Polymer	Downhole Motor Record						Jars			
Weight	1060	Run	Vendor	Serial Number	Daily			Run			Well
Viscosity	53				Circ	Drill	Total	Circ	Drill	Total	Hours
Water Loss		1	SLB		3.00	17.75	20.75	#REF!	#REF!	#REF!	#REF!
pH											Serial Number
Sand											
Temperature											
BHA # #REF!				BHA #				Wellsite Inventory			
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number	
								8" PDM	National OilW	3111-80016	
								8" PDM	National OilW	775-77197-24	
								7.75" PDM	National OilW	775-77198-24	
								8" Bell Sub	Schlumberge	1220360	
								8" Bell Sub	Schlumberge	3217100	
								6.75" NM Float Sub	Schlumberge	2317102	
								6.75" NM Float Sub	Schlumberge	2317106	
								6.75" NM UBHO	Schlumberge	2417113	
								6.75" NM UBHO	Schlumberge	3417105	
								6.75" Flex Monel	Marlex	30-0316	
								6.75" Flex Monel	Marlex	30-0317	
								6.75" Flex Pony Monel	Marlex	2676	
								6.75" Flex Pony Monel	Marlex	9147	
								6.75" X/O	Schlumberge	1217136	
								6.75" X/O	Schlumberge	2217154	
								6.75" X/O	Schlumberge	1215902	
								6.75" X/O	Schlumberge	2217106	
									Schlumberge	11622R	
									Schlumberge	5905H90	
									Schlumberge	N5662R	
									Schlumberge	1405H90	
									National OilW		
									National OilW		
Total Length				Total Length							
Personnel											
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man:	Mike Berg	Phone No: 1-403-699-2886					
Alternate:		Alternate:									
Night DD:	Clint Chase	Night MWD:	Jon Yon Woo								
Alternate:		Alternate:									
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature							

Schlumberger

Drilling and Measurements

Daily Service Report

January 15, 2004

Job Information										Day 6		
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400				
Well Name: Chevron et al Llard 3K-29				Rig: Akita #48				Job Number: 40009921				
Drilling Record		Time Record				Cost Estimate						
Bit Number	1	2	Hrs	From	To	Code	Description	Description	Unit	Price	Cost	
Bit Size	349 mm	3111 mm	3.25	0:00	3:15	2	Drill From 179m to 204m	DD Supervision		\$775		
Bit Type	HT03-CXP		0.25	3:15	3:30	7	Rig Service	MWD Supervision		\$575		
Jets (mm)	4	X 20	O U T	0.25	3:30	3:45	10	Survey	PowerDrive Flat Rate	\$28,000		
TFA (mm2)	#VALUE!		0.50	3:45	4:15	2	Drill From 204m to 220m	Flat Rate Operating	1 @	\$8,700	\$8,700.00	
Depth In	80.00	220.00	0.25	4:15	4:30	5	Circ	PowerDrive Non Productive Rate		\$17,000		
Depth Out	220.00	267.00	3.50	4:30	8:00	6	POOH	Gamma Ray Operating		\$950		
Meters	140.00	47.00	0.25	8:00	8:15	21	Safety Meeting	Gamma Ray Standby		\$0		
Hours	17.75	2.75	2.50	8:15	10:45	6	Lay Down 5" DC	E-Pulse Operating				
ROP (m/hr)	7.89	17.09	0.50	10:45	11:15	21	Safety Meeting Directional	E-Pulse Standby				
RPM	90	170/20	3.25	11:15	14:30	20	Dir Work Pick Up BHA #2	Silmpulse MWD Monitoring		\$3,500		
WOB	10	10	5.25	14:30	19:45	6	RIH Break Circ every 30m	Silmpulse Standby		n/c		
PP On	4200	8000	0.25	19:45	20:00	7	Rig Service	APWD Operating				
PP Off	4100	6600	0.25	20:00	20:15	21	Safety Meeting	XP/AD motor premium		\$30		
String Weight	35.0	34.0	2.75	20:15	23:00	2	Drill from 220m to 267m	Trucking Ticket No.				
PU Weight			0.75	23:00	23:45	10	Dev survey					
SO weight			0.25	23:45	0:00	7	Rig Service					
Pump Data								Tool Failure Credit				-\$350
Manufacturer	National	National						Thread Inspection				\$31
Model	10-P-130	10-P-130						Motor Thread Inspection				\$300
Tri/Duplex	tri	tri						Motor Reline * \$US				
Liner Size								Subsistence				\$75
Stroke Length	254	254	Total Hrs				24.00	Kilometers Today				200 @ \$0.85 \$170.00
M3/Stroke	0.0093	0.0167	Comments					Vehicle Plate #'s				
Stroke Rate	80	80						VTE 581 YRA 333				Daily Total \$8,870.00
Volume	0.744	1.336						YWJ 580				Accumulated \$26,200.00
Mud Record												
Type	Polymer	Downhole Motor Record										
Weight	1060	Run	Vendor	Serial Number	Daily			Run			Well	
Viscosity	53				Circ	Drill	Total	Circ	Drill	Total	Circ	Drill
Water Loss		1	National	31111-800016	1.00	2.75	3.75	1.00	2.75	3.75	1.00	2.75
pH												
Sand												
Temperature												
BHA #2				BHA #				Wellsite Inventory				
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number		
12 1/4"			0.30					8" PDM	National OilW	3111-80016		
Motor	National	3111-80016	7.52					8" PDM	National OilW	775-77197-24		
Bell Sub	Schlumberger	1220360	0.60					7.75" PDM	National OilW	775-77198-24		
X/O	Schlumberger	2217106	0.71					8" Bell Sub	Schlumberge	1220360		
Float Sub	Schlumberger	2317102	0.79					8" Bell Sub	Schlumberge	3217100		
UBHO Sub	Schlumberger	3417105	0.71					6.75" NM Float Sub	Schlumberge	2317102		
6 3/4" Flex Monel	Marlex	C6646300316	9.45					6.75" NM Float Sub	Schlumberge	2317106		
9 X 6 3/4" D C			27.50					6.75" NM UBHO	Schlumberge	2417113		
6 3/4" Jars			9.00					6.75" NM UBHO	Schlumberge	3417105		
21 X 5" H W D P			133.00					6.75" Flex Monel	Marlex	30-0316		
								6.75" Flex Monel	Marlex	30-0317		
								6.75" Flex Pony Monel	Marlex	2676		
								6.75" Flex Pony Monel	Marlex	9147		
								6.75" X/O	Schlumberge	1217139		
								6.75" X/O	Schlumberge	2217154		
								6.75" X/O	Schlumberge	1215902		
								6.75" X/O	Schlumberge	2217106		
									Schlumberge	11622R		
									Schlumberge	5905H90		
									Schlumberge	N5662R		
									Schlumberge	1405H90		
									ational OilW			
									ational OilW			
Total Length 189.58				Total Length								
Personnel												
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man:	Mike Berg	Phone No:	1-403-699-2886					
Alternate:		Alternate:										
Night DD:	Clint Chase	Night MWD:	Jon Yon Woo									
Alternate:		Alternate:										
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature								



Daily Service Report

Drilling and Measurements

January 16, 2004

Job Information										Day 7			
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400					
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 4000921					
Drilling Record		Time Record				Cost Estimate							
Bit Number	2	Hrs	From	To	Code	Description	Description	Unit	Price	Cost			
Bit Size	311mm	7.00	0:00	7:00	2	Drill From 267m to 328m	DD Supervision		\$775				
Bit Type	HT03-CXP	0.75	7:00	7:45	7	Survey	MWD Supervision		\$575				
Jets (mm)	Ø U T	0.25	7:45	8:00	10	Rig Service	PowerDrive Flat Rate		\$28,000				
TFA (mm2)	#VALUE!	6.00	8:00	14:00	2	Drill From 328m to 399m	Flat Rate Operating	1 @	\$8,700	\$8,700.00			
Depth In	267.00	1.50	14:00	15:30	10	Survey	PowerDrive Non Productive Rate		\$17,000				
Depth Out	495.00	0.25	15:30	15:45	7	Rig Service	Gamma Ray Operating		\$950				
Meters	228.00	3.25	15:45	19:00	2	Drill From 399m to 436m	Gamma Ray Standby		\$0				
Hours	19.50	1.00	19:00	20:00	10	Survey	E-Pulse Operating						
ROP (m/hr)	12.85	3.25	20:00	23:15	2	Drill From 436m to 495m	E-Pulse Standby						
RPM	165/20	0.50	23:15	23:45	10	Dev survey	Silmpulse MWD Monitoring		\$3,500				
WOB	11	0.25	23:45	0:00	7	Rig Service	Silmpulse Standby		n/c				
PP On	12000						APWD Operating						
PP Off	10200						XP/AD motor premium		\$30				
String Weight	50.0						Trucking Ticket No.						
PU Weight	51.0												
SO weight	49.0												
Pump Data						Tool Failure Credit							
Manufacturer	National	National											
Model	10-P-130	10-P130											
Tri/Duplex	Triplex	Triplex											
Liner Size	152	152											
Stroke Length	254	254											
M3/Stroke	0.0139	0.0139											
Stroke Rate	90	90											
Volume	1.251	1.251											
Mud Record		2.50 m3/min				VTE 581 YRA 333					Daily Total	\$8,870.00	
						YWJ 580					Accumulated	\$35,070.00	
Type	Polymer	Downhole Motor Record								Jars			
Weight	1140	Run	Vendor	Serial Number	Daily			Run			Well		
Viscosity	90				Circ	Drill	Total	Circ	Drill	Total	Circ	Drill	
Water Loss		1	National	3111-80016	3.25	19.50	22.75	4.25	22.25	26.50	4.25	22.25	
pH													
Sand													
Temperature	45												
BHA # 2		BHA #				Wellsite Inventory							
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number			
12 1/4" HT03-CXP	J&L		0.30					8" PDM	National OilW	3111-80016			
Motor	National	3111-80016	7.52					8" PDM	National OilW	775-77197-24			
Bell Sub	Schlumberger	1220360	0.60					7.75" PDM	National OilW	775-77198-24			
6 3/4" XJO	Schlumberger	2217106	0.71					8" Bell Sub	Schlumberger	1220360			
6 3/4" NM Float Sub	Schlumberger	2317102	0.79					8" Bell Sub	Schlumberger	3217100			
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71					6.75" NM Float Sub	Schlumberger	2317102			
6 3/4" Flex Monel	Marlex	C6646300316	9.45					6.75" NM Float Sub	Schlumberger	2317106			
5 X 7" D C	AKITA		47.67					6.75" NM UBHO	Schlumberger	2417113			
7" Jars	Smith	110570	9.61					6.75" NM UBHO	Schlumberger	3417105			
4 X 7" DC	AKITA		38.34					6.75" Flex Monel	Marlex	30-0316			
XJO	AKITA		1.22					6.75" Flex Monel	Marlex	30-0317			
21 X 5" HWDP	AKITA		200.00					6.75" Flex Pony Monel	Marlex	2676			
5" DP to Surface	AKITA							6.75" Flex Pony Monel	Marlex	9147			
								6.75" X/O	Schlumberger	1217136			
								6.75" X/O	Schlumberger	2217154			
								6.75" X/O	Schlumberger	1215902			
								6.75" X/O	Schlumberger	2217106			
									Schlumberger	11622R			
									Schlumberger	5905H90			
									Schlumberger	N5662R			
									Schlumberger	1405H90			
									National OilW				
									National OilW				
Total Length				316.92	Total Length								
Personnel													
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man:	Mike Berg	Phone No: 1-403-699-2886							
Alternate:		Alternate:											
Night DD:	Clint Chase	Night MWD:	Jon Yon Woo										
Alternate:		Alternate:											
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature									

Schlumberger

Drilling and Measurements

Day Service Report

January 17, 2004

Job Information										Day 8					
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400							
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921							
Drilling Record		Time Record				Cost Estimate									
Bit Number	2	Hrs	From	To	Code	Description	Description	Unit	Price	Cost					
Bit Size	311mm	5.25	0:00	5:15	2	Drill From 495m to 543m	DD Supervision		\$775						
Bit Type	HT03-CXP	1.50	5:15	6:45	22	Work on top Drive	MWD Supervision		\$575						
Jets (mm)	O U T	0.50	6:45	7:15	2	Drill From 543m to 545m	PowerDrive Flat Rate		\$28,000						
TFA (mm2)	#VALUE!	0.50	7:15	7:45	10	Survey	Flat Rate Operating	1 @	\$8,700	\$8,700.00					
Depth In	495.00	0.25	7:45	8:00	7	Rig Service	PowerDrive Non Productive Rate		\$17,000						
Depth Out	695.00	0.25	8:00	8:15	21	Safety Meeting	Gamma Ray Operating		\$950						
Meters	200.00	2.25	8:15	10:30	2	Drill From 545m to 578m	Gamma Ray Standby		\$0						
Hours	17.50	0.75	10:30	11:15	10	Survey	E-Pulse Operating								
ROP (m/hr)	11.43	1.00	11:15	12:15	2	Drill From 578m to 591m	E-Pulse Standby								
RPM	165/20	0.25	12:15	12:30	7	Rig Service	Silmpulse MWD Monitoring		\$3,500						
WOB	11	5.50	12:30	18:00	2	Drill From 591m to 655m	Silmpulse Standby		n/c						
PP On	12200	2.00	18:00	20:00	10	Dev survey	APWD Operating								
PP Off	10200	0.25	20:00	20:15	21	Safety Meeting	XP/AD motor premium		\$30						
String Weight	51.0	3.00	20:15	23:15	2	Drill from 655m to 695m	Trucking Ticket No.								
PU Weight	54.0	0.50	23:15	23:45	10	Dev survey									
SO weight	49.0	0.25	23:45	0:00	7	Rig Service									
Pump Data							Tool Failure Credit					-350			
Manufacturer	National	National					Thread Inspection					\$31			
Model	10-P-130	10-P130					Motor Thread Inspection					\$300			
Tri/Duplex	Triplex	Triplex					Motor Reline * \$US								
Liner Size	152	152					Subsistence					\$75			
Stroke Length	254	254					Kilometers Today					200 @ \$0.85 \$170.00			
M3/Stroke	0.0139	0.0139	Total Hrs		24.00		Vehicle Plate #s								
Stroke Rate	90	90	Comments				VTE 581	YRA 333	Daily Total		\$8,870.00				
Volume	1,251	1,251					YWJ 580		Accumulated		\$43,940.00				
Mud Record		2.50 m3/min		Downhole Motor Record								Jars			
Type	Polymer	Run	Vendor	Serial Number	Daily			Run			Well			Hours	Serial Number
Weight	1155				Circ	Drill	Total	Circ	Drill	Total	Circ	Drill	Total	47.75	110570
Viscosity	65														
Water Loss		1	National	3111-80016	3.75	17.50	21.25	8.00	39.75	47.75	8.00	39.75	47.75		
pH															
Sand															
Temperature	45														
BHA # 2				BHA #				Wellsite Inventory							
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number					
12 1/4" HTO3-CXP	J&L		0.30					8" PDM	National	3111-80016					
Motor	National	3111-80016	7.52					7.75" PDM	National	775-77197-24					
Bell Sub	Schlumberger	1220360	0.60					7.75" PDM	National	775-77198-24					
6 3/4" X/O	Schlumberger	2217106	0.71					8" Bell Sub	Schlumberger	1220360					
6 3/4" NM Float Sub	Schlumberger	2317102	0.79					8" Bell Sub	Schlumberger	3217100					
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71					6.75" NM Float Sub	Schlumberger	2317102					
6 3/4" Flex Monel	Marlex	C6646300316	9.45					6.75" NM Float Sub	Schlumberger	2317106					
5 X 7" D C	AKITA		47.67					6.75" NM UBHO	Schlumberger	2417113					
7" Jars	Smith	110570	9.61					6.75" NM UBHO	Schlumberger	3417105					
4 X 7" DC	AKITA		38.34					6.75" Flex Monel	Marlex	30-0316					
X/O	AKITA		1.22					6.75" Flex Monel	Marlex	30-0317					
21 X 5" HWDP	AKITA		200.00					6.75" Flex Pony Monel	Marlex	2676					
5" DP to Surface	AKITA							6.75" Flex Pony Monel	Marlex	9147					
								6.75" X/O	Schlumberger	1217136					
								6.75" X/O	Schlumberger	2217154					
								6.75" X/O	Schlumberger	1215902					
								6.75" X/O	Schlumberger	2217106					
									Schlumberger	11622R					
									Schlumberger	5905H90					
									Schlumberger	N5662R					
									Schlumberger	1405H90					
									National						
									National						
Total Length				316.92	Total Length										
Personnel															
Lead DD:	Arlen Yakimchuk			Lead MWD:	Paul Hardwick			Co.Man:	Mike Berg			Phone No:	1-403-699-2886		
Alternate:				Alternate:				Company Representatives Signature							
Night DD:	Clint Chase			Night MWD:	Jon Yon Woo										
Alternate:				Alternate:											
Field Phone No: 1-403-699-2887 / 860-4437															



Drilling and Measurements

Daily Service Report

January 18, 2004

Job Information										Day 9						
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400								
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921								
Drilling Record		Time Record				Cost Estimate										
Bit Number	2	Hrs	From	To	Code	Description	Description	Unit	Price	Cost						
Bit Size	311mm	7.25	0:00	7:15	2	Drill From 695m to 750m	DD Supervision		\$775							
Bit Type	HT03-CXP	0.50	7:15	7:45	10	Survey	MWD Supervision		\$575							
Jets (mm)	O U T	0.25	7:45	8:00	7	Rig Service	PowerDrive Flat Rate		\$28,000							
TFA (mm2)	#VALUE!	0.25	8:00	8:15	21	Pre Job Safety	Flat Rate Operating	1 @	\$8,700	\$8,700.00						
Depth In	695.00	1.75	8:15	10:00	2	Drill From 750m to 778m	PowerDrive Non Productive Rate		\$17,000							
Depth Out	778.00	0.75	10:00	10:45	10	Survey	Gamma Ray Operating		\$950							
Meters	283.00	1.00	10:45	11:45	5	Circ	Gamma Ray Standby		\$0							
Hours	48.75	3.50	11:45	15:15	6	POOH	E-Pulse Operating									
ROP (m/hr)	5.81	1.75	15:15	17:00	20	Lay Down Dir. Tools	E-Pulse Standby									
RPM	165/20	0.75	17:00	17:45	22	Pick Up Reaming Assembly	Slimpulse MWD Monitoring		\$3,500							
WOB	11	0.25	17:45	18:00	7	Rig Service	Slimpulse Standby		n/c							
PP On	12200	2.00	18:00	20:00	6	RIH	APWD Operating									
PP Off	10200	4.00	20:00	0:00	5	Ream	XP/AD motor premium		\$30							
String Weight	51.0						Trucking Ticket No.									
PU Weight	54.0															
SO weight	49.0															
Pump Data							Tool Failure Credit		-\$350							
Manufacturer	National	National					Thread Inspection		\$31							
Model	10-P-130	10-P130					Motor Thread Inspection		\$300							
Tri/Duplex	Triplex	Triplex					Motor Reline * \$US									
Liner Size	152	152					Subsistence		\$75							
Stroke Length	254	254					Kilometers Today	200 @	\$0.85	\$170.00						
M3/Stroke	0.0139	0.0139					Vehicle Plate #'s									
Stroke Rate	90	90					VTE 581	YRA 333	Daily Total	\$8,870.00						
Volume	1.251	1.251					YWJ 580		Accumulated	\$52,810.00						
Mud Record		2.50 m3/min	Downhole Motor Record				Jars									
Type	Polymer		Run	Vendor	Serial Number	Daily			Run			Well			Hours	Serial Number
Weight	1155					Circ	Drill	Total	Circ	Drill	Total	Circ	Drill	Total	63.00	110570
Viscosity	65															
Water Loss			1	National	3111-80016	6.25	9.00	15.25	14.25	48.75	63.00	14.25	48.75	63.00		
pH																
Sand																
Temperature	45															
BHA # 2				BHA #				Wellsite Inventory								
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number	Description	Vendor	Serial Number	Description	Vendor	Serial Number
12 1/4" HTO3-CXP	J&L	HAT4176C	0.30					8" PDM	National	3111-80016	8" PDM	National	3111-80016	8" PDM	National	3111-80016
Motor	National	3111-80016	7.52					7.75" PDM	National	775-77197-24	7.75" PDM	National	775-77197-24	7.75" PDM	National	775-77197-24
Bell Sub	Schlumberger	1220360	0.60					8" Bell Sub	Schlumberger	1220360	8" Bell Sub	Schlumberger	1220360	8" Bell Sub	Schlumberger	1220360
6 3/4" X/O	Schlumberger	2217106	0.71					8" Bell Sub	Schlumberger	3217100	8" Bell Sub	Schlumberger	3217100	8" Bell Sub	Schlumberger	3217100
6 3/4" NM Float Sub	Schlumberger	2317102	0.79					6.75" NM Float Sub	Schlumberger	2317102	6.75" NM Float Sub	Schlumberger	2317102	6.75" NM Float Sub	Schlumberger	2317102
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71					6.75" NM Float Sub	Schlumberger	2317106	6.75" NM Float Sub	Schlumberger	2317106	6.75" NM Float Sub	Schlumberger	2317106
6 3/4" Flex Monel	Marlex	C6646300316	9.45					6.75" NM UBHO	Schlumberger	2417113	6.75" NM UBHO	Schlumberger	2417113	6.75" NM UBHO	Schlumberger	2417113
5 X 7" D C	AKITA		47.67					6.75" NM UBHO	Schlumberger	3417105	6.75" NM UBHO	Schlumberger	3417105	6.75" NM UBHO	Schlumberger	3417105
7" Jars	Smith	110570	9.61					6.75" Flex Monel	Marlex	30-0316	6.75" Flex Monel	Marlex	30-0316	6.75" Flex Monel	Marlex	30-0316
4 X 7" DC	AKITA		38.34					6.75" Flex Monel	Marlex	30-0317	6.75" Flex Monel	Marlex	30-0317	6.75" Flex Monel	Marlex	30-0317
X/O	AKITA		1.22					6.75" Flex Pony Monel	Marlex	2676	6.75" Flex Pony Monel	Marlex	2676	6.75" Flex Pony Monel	Marlex	2676
21 X 5" HWDP	AKITA		200.00					6.75" Flex Pony Monel	Marlex	9147	6.75" Flex Pony Monel	Marlex	9147	6.75" Flex Pony Monel	Marlex	9147
5" DP to Surface	AKITA							6.75" X/O	Schlumberger	1217136	6.75" X/O	Schlumberger	1217136	6.75" X/O	Schlumberger	1217136
								6.75" X/O	Schlumberger	2217154	6.75" X/O	Schlumberger	2217154	6.75" X/O	Schlumberger	2217154
								6.75" X/O	Schlumberger	1215902	6.75" X/O	Schlumberger	1215902	6.75" X/O	Schlumberger	1215902
								6.75" X/O	Schlumberger	2217106	6.75" X/O	Schlumberger	2217106	6.75" X/O	Schlumberger	2217106
									Schlumberger	11622R		Schlumberger	11622R		Schlumberger	11622R
									Schlumberger	5905H90		Schlumberger	5905H90		Schlumberger	5905H90
									Schlumberger	N5662R		Schlumberger	N5662R		Schlumberger	N5662R
									Schlumberger	1405H90		Schlumberger	1405H90		Schlumberger	1405H90
									National			National			National	
									National			National			National	
Total Length				316.92	Total Length											
Personnel																
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man:	Mike Berg	Phone No:	1-403-699-2886									
Alternate:		Alternate:														
Night DD:	Clint Chase	Night MWD:	Jon Yon Woo													
Alternate:		Alternate:														
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature												

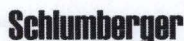
Schlumberger

Drilling and Measurements

Daily Service Report

January 19, 2004

Job Information										Day 10				
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400						
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921						
Drilling Record		Time Record				Cost Estimate								
Bit Number	2	Hrs	From	To	Code	Description	Description	Unit	Price	Cost				
Bit Size	311mm		0:00			Standby	DD Supervision	2 @	\$775	\$1,550.00				
Bit Type	HT03-CXP						MWD Supervision	2 @	\$575	\$1,150.00				
Jets (mm)	☐ U ☐ T						PowerDrive Flat Rate		\$28,000					
TFA (mm2)	#VALUE!						Flat Rate Operating		\$8,700					
Depth In	495.00						PowerDrive Non Productive Rate		\$17,000					
Depth Out	778.00						Gamma Ray Operating		\$950					
Meters	283.00						Gamma Ray Standby		\$0					
Hours	48.75						E-Pulse Operating							
ROP (m/hr)	5.81						E-Pulse Standby							
RPM	165/20						Slimpulse MWD Monitoring		\$3,500					
WOB	11						Slimpulse Standby		n/c					
PP On	12200						APWD Operating							
PP Off	10200						XP/AD motor premium		\$30					
String Weight	51.0						Trucking Ticket No.							
PU Weight	54.0													
SO weight	49.0													
Pump Data						Tool Failure Credit								
Manufacturer	National	National					Thread Inspection							
Model	10-P-130	10-P-130					\$31							
Tri/Duplex	Triplex	Triplex					Motor Thread Inspection							
Liner Size	152	152					\$300							
Stroke Length	254	254					Motor Reline * \$US							
M3/Stroke	0.0139	0.0139					\$75							
Stroke Rate	90	90					Subsistence							
Volume	1,251	1,251					Kilometers Today							
						200 @ \$0.85 \$170.00								
						Vehicle Plate #s								
						VTE 581 YRA 333								
						Daily Total								
						\$2,870.00								
Mud Record		2.50 m3/min				Downhole Motor Record								
Type	Polymer					Jars								
Weight	1155	Run	Vendor	Serial Number	Daily			Run			Well			
Viscosity	65				Circ	Drill	Total	Circ	Drill	Total	Circ	Drill	Total	
Water Loss		1	National	3111-80016	0.00	0.00	0.00							
pH														
Sand														
Temperature	45													
BHA #2						BHA #				Wellsite Inventory				
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number				
12 1/4" HTO3-CXP	J&L	HAT4176C	0.30					8" PDM	National	3111-80016				
Motor	National	3111-80016	7.52					7.75" PDM	National	775-77197-24				
Bell Sub	Schlumberger	1220360	0.60					7.75" PDM	National	775-77198-24				
6 3/4" X/O	Schlumberger	2217106	0.71					8" Bell Sub	Schlumberger	1220360				
6 3/4" NM Float Sub	Schlumberger	2317102	0.79					8" Bell Sub	Schlumberger	3217100				
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71					6.75" NM Float Sub	Schlumberger	2317102				
6 3/4" Flex Monel	Marlex	C6646300316	9.45					6.75" NM Float Sub	Schlumberger	2317106				
5 X 7" D C	AKITA		47.67					6.75" NM UBHO	Schlumberger	2417113				
7" Jars	Smith	110570	9.61					6.75" NM UBHO	Schlumberger	3417105				
4 X 7" DC	AKITA		38.34					6.75" Flex Monel	Marlex	30-0316				
X/O	AKITA		1.22					6.75" Flex Monel	Marlex	30-0317				
21 X 5" HWDP	AKITA		200.00					6.75" Flex Pony Monel	Marlex	2676				
5" DP to Surface	AKITA							6.75" Flex Pony Monel	Marlex	9147				
								6.75" X/O	Schlumberger	1217136				
								6.75" X/O	Schlumberger	2217154				
								6.75" X/O	Schlumberger	1215902				
								6.75" X/O	Schlumberger	2217106				
									Schlumberger	11622R				
									Schlumberger	5905H90				
									Schlumberger	N5662R				
									Schlumberger	1405H90				
									National					
									National					
Total Length				316.92				Total Length						
Personnel														
Lead DD:	Arlen Yakimchuk			Lead MWD:	Paul Hardwick			Co.Man:	Mike Berg			Phone No:	1-403-699-2886	
Alternate:				Alternate:										
Night DD:	Clint Chase			Night MWD:	Jon Yon Woo									
Alternate:				Alternate:										
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature										



Drilling and Measurements

Daily Service Report

January 20, 2004

Job Information										Day 11			
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400					
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921					
Drilling Record		Time Record				Cost Estimate							
Bit Number		Hrs	From	To	Code	Description	Description	Unit	Price	Cost			
Bit Size			0.00			Standby	DD Supervision	2 @	\$775	\$1,550.00			
Bit Type							MWD Supervision	2 @	\$575	\$1,150.00			
Jets (mm)							PowerDrive Flat Rate		\$28,000				
TFA (mm2)							Flat Rate Operating		\$8,700				
Depth In							PowerDrive Non Productive Rate		\$17,000				
Depth Out							Gamma Ray Operating		\$950				
Meters							Gamma Ray Standby		\$0				
Hours							E-Pulse Operating						
ROP (m/hr)							E-Pulse Standby						
RPM							Slimpulse MWD Monitoring		\$3,500				
WOB							Slimpulse Standby		n/c				
PP On							APWD Operating						
PP Off							XPIAD motor premium		\$30				
String Weight							Trucking Ticket No.						
PU Weight													
SO weight													
Pump Data													
Manufacturer	National	National					Tool Failure Credit		-\$350				
Model	10-P-130	10-P130					Thread Inspection		\$31				
Tri/Duplex	Triplex	Triplex					Motor Thread Inspection		\$300				
Liner Size	152	152					Motor Reline * \$US						
Stroke Length	254	254					Subsistence		\$75				
M3/Stroke	0.0139	0.0139					Kilometers Today	200 @	\$0.85	\$170.00			
Stroke Rate							Vehicle Plate #'s						
Volume							VTE 581	YRA 333	Daily Total	\$2,870.00			
Mud Record	0.00 m3/min					YVW 580				Accumulated	\$58,550.00		
Type		Downhole Motor Record				Jars							
Weight		Run	Vendor	Serial Number		Daily			Well			Hours	Serial Number
Viscosity						Circ	Drill	Total	Circ	Drill	Total	0.00	110570
Water Loss						0.00	0.00	0.00	0.00	0.00	0.00		
pH													
Sand													
Temperature													
BHA # 2		BHA #				Wellsite Inventory							
Description	Vendor	Serial Number	Length		Description	Vend	SN	Length	Description	Vendor	Serial Number		
12 1/4" HTO3-CXP	J&L	HAT4176C	0.30						8" PDM	National	3111-80016		
Motor	National	3111-80016	7.52						7.75" PDM	National	775-77197-24		
Bell Sub	Schlumberger	1220360	0.60						7.75" PDM	National	775-77198-24		
6 3/4" X/O	Schlumberger	2217106	0.71						8" Bell Sub	Schlumberger	1220360		
6 3/4" NM Float Sub	Schlumberger	2317102	0.79						8" Bell Sub	Schlumberger	3217100		
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71						6.75" NM Float Sub	Schlumberger	2317102		
6 3/4" Flex Monel	Marlex	C6646300316	9.45						6.75" NM Float Sub	Schlumberger	2317106		
5 X 7" D C	AKITA		47.67						6.75" NM UBHO	Schlumberger	2417113		
7" Jars	Smith	110570	9.61						6.75" NM UBHO	Schlumberger	3417105		
4 X 7" DC	AKITA		38.34						6.75" Flex Monel	Marlex	30-0316		
X/O	AKITA		1.22						6.75" Flex Monel	Marlex	30-0317		
21 X 5" HWDP	AKITA		200.00						6.75" Flex Pony Monel	Marlex	2676		
5" DP to Surface	AKITA								6.75" Flex Pony Monel	Marlex	9147		
									6.75" X/O	Schlumberger	1217136		
									6.75" X/O	Schlumberger	2217154		
									6.75" X/O	Schlumberger	1215902		
									6.75" X/O	Schlumberger	2217106		
										Schlumberger	11622R		
										Schlumberger	5905H90		
										Schlumberger	N5662R		
										Schlumberger	1405H90		
										National			
										National			
Total Length				316.92	Total Length								
Personnel													
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man: Mike Berg/Al Curtis/John Spears				Phone No: 1-403-699-2886					
Alternate:		Alternate:											
Night DD:	Clint Chase	Night MWD:	Jon Yan Woo										
Alternate:		Alternate:											
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature									

Schlumberger

Drilling and Measurements

Daily Service Report

January 21, 2004

Job Information										Day 12	
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400			
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921			
Drilling Record		Time Record				Cost Estimate					
Bit Number		Hrs	From	To	Code	Description	Description	Unit	Price	Cost	
Bit Size			0.00			Standby	DD Supervision	2 @	\$775	\$1,550.00	
Bit Type							MWD Supervision	2 @	\$575	\$1,150.00	
Jets (mm)							PowerDrive Flat Rate		\$28,000		
TFA (mm2)							Flat Rate Operating		\$8,700		
Depth In							PowerDrive Non Productive Rate		\$17,000		
Depth Out							Gamma Ray Operating		\$950		
Meters							Gamma Ray Standby		\$0		
Hours							E-Pulse Operating				
ROP (m/hr)							E-Pulse Standby				
RPM							Silmpulse MWD Monitoring		\$3,500		
WOB							Silmpulse Standby		n/c		
PP On							APWD Operating				
PP Off							XP/AD motor premium		\$30		
String Weight							Trucking Ticket No.				
PU Weight											
SO weight											
Pump Data						Tool Failure Credit					
Manufacturer	National	National									
Model	10-P-130	10-P-130									
Tri/Duplex	Triplex	Triplex									
Liner Size	152	152									
Stroke Length	254	254									
M3/Stroke	0.0139	0.0139									
Stroke Rate											
Volume	0	0									
Mud Record		0.00 m3/min				VTE 581 YRA 333 Daily Total \$2,870.00					
						YWJ 580 Accumulated \$61,420.00					
Type		Downhole Motor Record				Jars					
Weight		Run	Vendor	Serial Number		Daily	Run	Well	Hours	Serial Number	
Viscosity						Circ Drill Total	Circ Drill Total	Circ Drill Total	0.00	110570	
Water Loss						0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00			
pH											
Sand											
Temperature											
BHA # 3		BHA #				Wellsite Inventory					
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number	
3/4" RSX 162HDW (2x13)X4X11	REED	204281	0.25					8" PDM	National	3111-80016	
PD 675 Bias Unit	Schlumberger	BU-60103	0.71					7.75" PDM	National	775-77197-24	
PD 675 Extension Sub	Schlumberger	ES-60156	0.32					7.75" PDM	National	775-77198-24	
PD 675 Control Collar (CU-00229	Schlumberger	CC-60046	3.01					8" Bell Sub	Schlumberger	1220360	
6 3/4" Stabilizer	National	SS-75-111	1.16					8" Bell Sub	Schlumberger	3217100	
6 3/4" Cross Over Sub	Schlumberger	1216573	0.31					6.75" NM Float Sub	Schlumberger	2317102	
6 3/4" NM Float Sub	Schlumberger	2317102	0.79					6.75" NM Float Sub	Schlumberger	2317106	
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71					6.75" NM UBHO	Schlumberger	2417113	
6 3/4" Flex Monel	Marlex	C6646300316	9.45					6.75" NM UBHO	Schlumberger	3417105	
6 3/4" Flex Monel	Marlex	C6646300317	9.45					6.75" Flex Monel	Marlex	30-0316	
7" Jars	Smith	110570	9.61					6.75" Flex Monel	Marlex	30-0317	
X/O	AKITA		1.22					6.75" Flex Pony Monel	Marlex	2676	
21 X 5" HWDP	AKITA		195.19					6.75" Flex Pony Monel	Marlex	9147	
5" DP to Surface	AKITA							6.75" X/O	Schlumberger	1217136	
								6.75" X/O	Schlumberger	2217154	
								6.75" X/O	Schlumberger	1215902	
								6.75" X/O	Schlumberger	2217106	
									Schlumberger	11622R	
									Schlumberger	5905H90	
									Schlumberger	N5662R	
									Schlumberger	1405H90	
									National		
									National		
Total Length		232.18				Total Length					
Personnel											
Lead DD:	Arlen Yakimchuk			Lead MWD:	Paul Hardwick			Co.Man:	Mike Berg/Al Curtis/John Spears		
Alternate:				Alternate:				Phone No:	1-403-699-2886		
Night DD:	Clint Chase			Night MWD:	Jon Yon Woo						
Alternate:				Alternate:							
Field Phone No: 1-403-699-2887 / 860-4437						Company Representatives Signature					



Drilling and Measurements

Daily Service Report

January 22, 2004

Job Information										Day 13	
Company: Chevron Canada Resources			Location: 3K-29			AFE Number: RWWNC-R3004-400					
Well Name: Chevron et al Liard 3K-29			Rig: Akita #48			Job Number: 40009921					
Drilling Record		Time Record				Cost Estimate					
Bit Number		Hrs	From	To	Code	Description	Description	Unit	Price	Cost	
Bit Size			0:00			Standby	DD Supervision	2 @	\$775	\$1,550.00	
Bit Type							MWD Supervision	2 @	\$575	\$1,150.00	
Jets (mm)							PowerDrive Flat Rate		\$28,000		
TFA (mm2)							Flat Rate Operating		\$8,700		
Depth In							PowerDrive Non Productive Rate		\$17,000		
Depth Out							Gamma Ray Operating		\$950		
Meters							Gamma Ray Standby		\$0		
Hours							E-Pulse Operating				
ROP (m/hr)							E-Pulse Standby				
RPM							Slimpulse MWD Monitoring		\$3,500		
WOB							Slimpulse Standby		n/c		
PP On							APWD Operating				
PP Off							XP/AD motor premium		\$30		
String Weight							Trucking Ticket No.				
PU Weight											
SO weight											
Pump Data						Tool Failure Credit					
Manufacturer	National	National							-\$350		
Model	10-P-130	10-P130					Thread Inspection		\$31		
Tri/Duplex	Triplex	Triplex					Motor Thread Inspection		\$300		
Liner Size	152	152					Motor Reine * \$US				
Stroke Length	254	254					Subsistence		\$75		
M3/Stroke	0.0139	0.0139					Kilometers Today	200 @	\$0.85	\$170.00	
Stroke Rate							Vehicle Plate #'s				
Volume	0	0					VTE 581	YRA 333	Daily Total	\$2,870.00	
Mud Record	0.00 m3/min						YWJ 580		Accumulated	\$64,290.00	
Type		Downhole Motor Record				Jars					
Weight		Run	Vendor	Serial Number		Daily		Run		Well	
Viscosity						Circ	Drill	Total	Circ	Drill	Total
Water Loss						0.00	0.00	0.00	0.00	0.00	0.00
pH											
Sand											
Temperature											
BHA # 3				BHA #				Wellsite Inventory			
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number	
3/4" RSX 162HDW (2x13)(4X11)	REED	204281	0.25					8" PDM	National	3111-80016	
PD 675 Bias Unit	Schlumberger	BU-60103	0.71					7.75" PDM	National	775-77197-24	
PD 675 Extension Sub	Schlumberger	ES-60156	0.32					7.75" PDM	National	775-77198-24	
PD 675 Control Collar (CU-00229)	Schlumberger	CC-60046	3.01					8" Bell Sub	Schlumberger	1220360	
6 3/4" Stabilizer	National	SS-75-111	1.16					8" Bell Sub	Schlumberger	3217100	
6 3/4" Cross Over Sub	Schlumberger	1216573	0.31					6.75" NM Float Sub	Schlumberger	2317102	
6 3/4" NM Float Sub	Schlumberger	2317102	0.79					6.75" NM Float Sub	Schlumberger	2317106	
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71					6.75" NM UBHO	Schlumberger	2417113	
6 3/4" Flex Monel	Marlex	C6646300316	9.45					6.75" NM UBHO	Schlumberger	3417105	
6 3/4" Flex Monel	Marlex	C6646300317	9.45					6.75" Flex Monel	Marlex	30-0316	
7" Jars	Smith	110570	9.61					6.75" Flex Monel	Marlex	30-0317	
X/O	AKITA		1.22					6.75" Flex Pony Monel	Marlex	2676	
21 X 5" HWDP	AKITA		195.19					6.75" Flex Pony Monel	Marlex	9147	
5" DP to Surface	AKITA							6.75" X/O	Schlumberger	1217136	
								6.75" X/O	Schlumberger	2217154	
								6.75" X/O	Schlumberger	1215902	
								6.75" X/O	Schlumberger	2217106	
									Schlumberger	11622R	
									Schlumberger	5905H90	
									Schlumberger	N5662R	
									Schlumberger	1405H90	
									National		
									National		
Total Length				232.18	Total Length						
Personnel											
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man: Mike Berg/Al Curtis/John Spears				Phone No: 1-403-699-2886			
Alternate:		Alternate:									
Night DD:	Clint Chase	Night MWD:	Jon Yon Woo								
Alternate:		Alternate:									
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature							

Schlumberger

Drilling and Measurements

Daily Service Report

January 23, 2004

Job Information										Day 14			
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400					
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921					
Drilling Record		Time Record				Cost Estimate							
Bit Number		Hrs	From	To	Code	Description	Description	Unit	Price	Cost			
Bit Size			0.00			Standby	DD Supervision	2 @	\$775	\$1,550.00			
Bit Type							MWD Supervision	2 @	\$575	\$1,150.00			
Jets (mm)							PowerDrive Flat Rate		\$28,000				
TFA (mm2)							Flat Rate Operating		\$8,700				
Depth In							PowerDrive Non Productive Rate		\$17,000				
Depth Out							Gamma Ray Operating		\$950				
Meters							Gamma Ray Standby		\$0				
Hours							E-Pulse Operating						
ROP (m/hr)							E-Pulse Standby						
RPM							Slimpulse MWD Monitoring		\$3,500				
WOB							Slimpulse Standby		n/c				
PP On							APWD Operating						
PP Off							XP/AD motor premium		\$30				
String Weight							Trucking Ticket No.						
PU Weight													
SO weight													
Pump Data						Tool Failure Credit							
Manufacturer	National	National					Thread Inspection		\$31				
Model	10-P-130	10-P130					Motor Thread Inspection		\$300				
Tri/Duplex	Triplex	Triplex					Motor Reline * \$US						
Liner Size	152	152					Subsistence		\$75				
Stroke Length	254	254					Kilometers Today	200 @	\$0.85	\$170.00			
M3/Stroke	0.0139	0.0139					Vehicle Plate #'s						
Stroke Rate			Comments				VTE 581	YRA 333	Daily Total	\$2,870.00			
Volume	0	0					YWJ 580		Accumulated	\$67,160.00			
Mud Record	0.00 m3/min												
Type		Downhole Motor Record				Jars							
Weight		Run	Vendor	Serial Number		Daily		Run		Well		Hours	Serial Number
Viscosity						Circ	Drill	Total	Circ	Drill	Total		
Water Loss						0.00	0.00	0.00	0.00	0.00	0.00	0.00	110570
pH													
Sand													
Temperature													
BHA # 3				BHA #				Wellsite Inventory					
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number			
3/4" RSX 162HDW (2x13)(4X11)	REED	204281	0.25					8" PDM	National	3111-80016			
PD 675 Bias Unit	Schlumberger	BU-60103	0.71					7.75" PDM	National	775-77197-24			
PD 675 Extension Sub	Schlumberger	ES-60156	0.32					7.75" PDM	National	775-77198-24			
PD 675 Control Collar (CU-00228)	Schlumberger	CC-60046	3.01					8" Bell Sub	Schlumberger	1220360			
6 3/4" Stabilizer	National	SS-75-111	1.16					8" Bell Sub	Schlumberger	3217100			
6 3/4" Cross Over Sub	Schlumberger	1216573	0.31					6.75" NM Float Sub	Schlumberger	2317102			
6 3/4" NM Float Sub	Schlumberger	2317102	0.79					6.75" NM Float Sub	Schlumberger	2317106			
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71					6.75" NM UBHO	Schlumberger	2417113			
6 3/4" Flex Monel	Marlex	C6646300316	9.45					6.75" NM UBHO	Schlumberger	3417105			
6 3/4" Flex Monel	Marlex	C6646300317	9.45					6.75" Flex Monel	Marlex	30-0316			
7" Jars	Smith	110570	9.61					6.75" Flex Monel	Marlex	30-0317			
X/O	AKITA		1.22					6.75" Flex Pony Monel	Marlex	2676			
21 X 5" HWD	AKITA		195.19					6.75" Flex Pony Monel	Marlex	9147			
5" DP to Surface	AKITA							6.75" X/O	Schlumberger	1217136			
								6.75" X/O	Schlumberger	2217154			
								6.75" X/O	Schlumberger	1215902			
								6.75" X/O	Schlumberger	2217106			
									Schlumberger	11622R			
									Schlumberger	5905H90			
									Schlumberger	N5662R			
									Schlumberger	1405H90			
									National				
									National				
Total Length				232.18	Total Length								
Personnel													
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man:	Mike Berg/Al Curtis/John Spears	Phone No:	1-403-699-2886						
Alternate:		Alternate:											
Night DD:	Clint Chase	Night MWD:	Jon Yon Woo										
Alternate:		Alternate:											
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature									



Drilling and Measurements

Daily Service Report

January 24, 2004

Job Information										Day 15	
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400			
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921			
Drilling Record		Time Record				Cost Estimate					
Bit Number	3	Hrs	From	To	Code	Description	Description	Unit	Price	Cost	
Bit Size	222 mm	2.00	0:00	2:00	6	Pick up drill pipe	DD Supervision	2 @	\$775	\$1,550.00	
Bit Type	RSX 162HDW	0.25	2:00	2:15	7	Rig Service	MWD Supervision	2 @	\$575	\$1,150.00	
Jets (mm)	11 11 12 12 12 12	5.75	2:15	8:00	6	Pick up drill pipe	PowerDrive Flat Rate	1 @	\$28,000	\$28,000.00	
TFA (mm2)	303	0.25	8:00	8:15	21	Safety meeting	Flat Rate Operating		\$8,700		
Depth In	778.00	5.00	8:15	13:15	6	Pick up drill pipe	PowerDrive Non Productive Rate		\$17,000		
Depth Out	781.00	2.75	13:15	16:00	20	Pick up Dir. Tools	Gamma Ray Operating		\$950		
Meters	3.00	0.25	16:00	16:15	7	Rig Service	Gamma Ray Standby		\$0		
Hours	2.00	1.75	16:15	18:00	6	R.I.H	E-Pulse Operating				
ROP (m/hr)	1.50	1.00	18:00	19:00	6	Pick up drill pipe	E-Pulse Standby				
RPM	50	1.00	19:00	20:00	22	Rig out lay down truck	Slimpulse MWD Monitoring		\$3,500		
WOB	3	0.25	20:00	20:15	21	Safety meeting	Slimpulse Standby		n/c		
PP On	4000	0.50	20:15	20:45	6	Rig out lay down truck	APWD Operating				
PP Off		0.50	20:45	21:15	6	R.I.H Drill out float	XPI/AD motor premium		\$30		
String Weight	47.0	2.75	21:15	0:00	2	Drill from 757m to 781	Trucking Ticket No.				
PU Weight											
SO weight											
Pump Data						Tool Failure Credit					-\$350
Manufacturer	National	National									
Model	10-P-130	10-P130									
Tri/Duplex	Triplex	Triplex									
Liner Size	152	152									
Stroke Length	254	254									
M3/Stroke	0.0139	0.0139									
Stroke Rate											
Volume	0	0									
Mud Record		0.00 m3/min				VTE 581 YRA 333				Daily Total	\$31,294.00
Type						YVJ 580				Accumulated	\$98,454.00
Weight											
Viscosity											
Water Loss											
pH											
Sand											
Temperature											
BHA # 3						BHA #				Wellsite Inventory	
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number	
3/4" RSX 162HDW (2x13)4X11	REED	204281	0.25					8" PDM	National	3111-80016	
PD 675 Bias Unit	Schlumberger	BU-60103	0.71					7.75" PDM	National	775-77197-24	
PD 675 Extension Sub	Schlumberger	ES-60156	0.32					7.75" PDM	National	775-77198-24	
PD 675 Control Collar (CU-00229	Schlumberger	CC-60046	3.01					8" Bell Sub	Schlumberger	1220360	
6 3/4" Stabilizer	National	SS-75-111	1.16					8" Bell Sub	Schlumberger	3217100	
6 3/4" Cross Over Sub	Schlumberger	1216573	0.31					6.75" NM Float Sub	Schlumberger	2317102	
6 3/4" NM Float Sub	Schlumberger	2317102	0.79					6.75" NM Float Sub	Schlumberger	2317106	
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71					6.75" NM UBHO	Schlumberger	2417113	
6 3/4" Flex Monel	Marlex	C6646300316	9.45					6.75" NM UBHO	Schlumberger	3417105	
6 3/4" Flex Monel	Marlex	C6646300317	9.45					6.75" Flex Monel	Marlex	30-0316	
7" Jars	Smith	110570	9.61					6.75" Flex Monel	Marlex	30-0317	
X/O	AKITA		1.22					6.75" Flex Pony Monel	Marlex	2676	
21 X 5" HWDP	AKITA		195.19					6.75" Flex Pony Monel	Marlex	9147	
5" DP to Surface	AKITA							6.75" X/O	Schlumberger	1217136	
								6.75" X/O	Schlumberger	2217154	
								6.75" X/O	Schlumberger	1215902	
								6.75" X/O	Schlumberger	2217106	
									Schlumberger	11622R	
									Schlumberger	5905H90	
									Schlumberger	N5662R	
									Schlumberger	1405H90	
									National		
									National		
Total Length		232.18		Total Length							
Personnel											
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man:	Mike Berg/AI Curtis/John Spears	Phone No:	1-403-699-2886				
Alternate:		Alternate:									
Night DD:	Clint Chase	Night MWD:	Jon Yon Woo								
Alternate:		Alternate:									
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature							



Drilling and Measurements

Daily Service Report

January 25, 2004

Job Information										Day 16				
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400						
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921						
Drilling Record		Time Record				Cost Estimate								
Bit Number	4	Hrs	From	To	Code	Description	Description	Unit	Price	Cost				
Bit Size	222 mm	0.75	0:00	0:45	22	Drill out shoe and float	DD Supervision	2 @	\$775	\$1,550.00				
Bit Type	DSX146GWJ	0.75	0:45	1:30	2	Drill from 778m-781m	MWD Supervision	2 @	\$575	\$1,150.00				
Jets (mm)	15.9 15.9 15.9 9.5 9.5 9.5	0.25	1:30	1:45	21	Safety meeting	PowerDrive Flat Rate		\$28,000					
TFA (mm2)	596	0.50	1:45	2:15	23	F.I.T	Flat Rate Operating		\$8,700					
Depth In	778.00	1.00	2:15	3:15	5	Displace to invert	PowerDrive Non Productive Rate	1 @	\$17,000	\$17,000.00				
Depth Out	923.00	1.75	3:15	5:00	2	Drill from 781m-797m	Gamma Ray Operating		\$950					
Meters	145.00	0.25	5:00	5:15	24	B.O.P drill	Gamma Ray Standby		\$0					
Hours	9.75	2.00	5:15	7:15	2	Drill from 797m-831m	E-Pulse Operating							
ROP (m/hr)	14.87	0.50	7:15	7:45	10	Accumulated surveys	E-Pulse Standby							
RPM	25	0.25	7:45	8:00	7	Rig Service	Slimpulse MWD Monitoring		\$3,500					
WOB	1	0.25	8:00	8:15	21	Safety meeting	Slimpulse Standby		n/c					
PP On	9500	0.25	8:15	8:30	5	Flow check	APWD Operating							
PP Off	7900	2.50	8:30	11:00	6	P.O.O.H	XPI/AD motor premium		\$30					
String Weight	63.0	2.50	11:00	13:30	20	change out Dir. Tools	Trucking Ticket No.							
PU Weight	67.0	2.25	13:30	15:45	6	R.I.H								
SO weight	60.0	0.25	15:45	16:00	7	Rig Service								
Pump Data		2.25	16:00	18:15	2	Drill from 831m-864m	Tool Failure Credit		-\$350					
Manufacturer	National	1.00	18:15	19:15	22	change saver sub								
Model	10-P-130	0.75	19:15	20:00	10	Dev survey	Thread Inspection		\$31					
Tri/Duplex	Triplex	0.50	20:00	20:30	21	Safety meeting/rig service	Motor Thread Inspection		\$300					
Liner Size	152	3.00	20:30	23:30	2	drill from 864m-923m	Motor Reline * \$US							
Stroke Length	254	0.50	23:30	0:00	10	Dev survey	Subsistence		\$75					
M3/Stroke	0.0139	Total Hrs 24.00					Kilometers Today	200 @	\$0.85	\$170.00				
Stroke Rate	108	Comments					Vehicle Plate #'s							
Volume	1.5012	VTE 581				YRA 333	Daily Total		\$19,870.00					
Mud Record		1.50 m3/min				YWJ 580				Accumulated	\$118,324.00			
Type	Invert	Downhole Motor Record				Jars								
Weight	1050	Run	Vendor	Serial Number	Daily			Run			Well		Hours	Serial Number
Viscosity	65				Circ	Drill	Total	Circ	Drill	Total	Circ	Drill	Total	
Water Loss		1	SLB	675A 24004	3.00	9.75	12.75	3.00	9.75	12.75	3.00	9.75	12.75	
pH														
Sand														
Temperature	35													
BHA # 3					BHA #					Wellsite Inventory				
Description	Vendor	Serial Number	Length		Description	Vend	SN	Length	Description	Vendor	Serial Number			
3/4" RSX 162HDW (2x11)4X12	REED	204281	0.25						8" PDM	National	3111-80016			
PD 675 Bias Unit	Schlumberger	BU-60103	0.71						7.75" PDM	National	775-77197-24			
PD 675 Extension Sub	Schlumberger	ES-60156	0.32						7.75" PDM	National	775-77198-24			
PD 675 Control Collar (CU-00229	Schlumberger	CC-60046	3.01						8" Bell Sub	Schlumberger	1220360			
6 3/4" Stabilizer	National	SS-75-111	1.16						8" Bell Sub	Schlumberger	3217100			
6 3/4" Cross Over Sub	Schlumberger	1216573	0.31						6.75" NM Float Sub	Schlumberger	2317102			
6 3/4" NM Float Sub	Schlumberger	2317102	0.79						6.75" NM Float Sub	Schlumberger	2317106			
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71						6.75" NM UBHO	Schlumberger	2417113			
6 3/4" Flex Monel	Marlex	C6646300316	9.45						6.75" NM UBHO	Schlumberger	3417105			
6 3/4" Flex Monel	Marlex	C6646300317	9.45						6.75" Flex Monel	Marlex	30-0316			
5 X 7" D C	AKITA		47.67						6.75" Flex Monel	Marlex	30-0317			
7" Jars	Smith	110570	9.61						6.75" Flex Pony Monel	Marlex	2676			
4 X 7" DC	AKITA		38.34						6.75" Flex Pony Monel	Marlex	9147			
X/O	AKITA		1.22						6.75" X/O	Schlumberger	1217136			
21 X 5" HWDP	AKITA		195.19						6.75" X/O	Schlumberger	2217154			
5" DP to Surface	AKITA								6.75" X/O	Schlumberger	1215902			
									6.75" X/O	Schlumberger	2217106			
										Schlumberger	11622R			
										Schlumberger	5905H90			
										Schlumberger	N5662R			
										Schlumberger	1405H90			
										National				
										National				
Total Length 318.19					Total Length									
Personnel														
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man:	Mike Berg/AI Curtis/John Spear	Phone No:	1-403-699-2886							
Alternate:		Alternate:												
Night DD:	Clint Chase	Night MWD:	Jong Wan Yoo											
Alternate:		Alternate:												
Field Phone No: 1-403-699-2887 / 860-4437					Company Representatives Signature									



Drilling and Measurements

Daily Service Report

January 26, 2004

Job Information										Day 17			
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400					
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921					
Drilling Record		Time Record				Cost Estimate							
Bit Number	4	Hrs	From	To	Code	Description	Description	Unit	Price	Cost			
Bit Size	222 mm	6.75	0.00	6:45	2	Drill from 922m to 1008	DD Supervision		\$775				
Bit Type	DSX146GWJ	1.00	6:45	7:45	10	Dev survey	MWD Supervision		\$575				
Jets (mm)	15.9 15.9 15.9 9.5 9.5 9.5	0.25	7:45	8:00	22	H2S drill	PowerDrive Flat Rate		\$28,000				
TFA (mm2)	596	0.25	8:00	8:15	21	Safety meeting	Flat Rate Operating	1 @	\$8,700	\$8,700.00			
Depth In	923.00	2.00	8:15	10:15	2	Drill from 1008m to 1066m	PowerDrive Non Productive Rate		\$17,000				
Depth Out	1266.00	1.00	10:15	11:15	10	Dev survey	Gamma Ray Operating		\$950				
Meters	343.00	0.25	11:15	11:30	7	Rig Service	Gamma Ray Standby		\$0				
Hours	17.75	6.00	11:30	17:30	2	Drill from 1066m to 1199m	E-Pulse Operating						
ROP (m/hr)	19.32	2.50	17:30	20:00	10	Dev survey	E-Pulse Standby						
RPM	110/25	0.25	20:00	20:15	21	Safety meeting	Slimpulse MWD Monitoring		\$3,500				
WOB	4	3.00	20:15	23:15	2	Drill from 1199m to 1266m	Slimpulse Standby		n/c				
PP On	10200	0.50	23:15	23:45	10	Dev survey	APWD Operating						
PP Off	7900	0.25	23:45	0:00	7	Rig Service	XP/AD motor premium	22.75 @	\$30	\$682.50			
String Weight	70.0						Trucking Ticket No.						
PU Weight	78.0												
SO weight	62.0												
Pump Data						Tool Failure Credit					-\$350		
Manufacturer	National	National					Thread Inspection		\$31				
Model	10-P-130	10-P-130					Motor Thread Inspection		\$300				
Tri/Duplex	Triplex	Triplex					Motor Reline * \$US						
Liner Size	152	152					Subsistence		\$75				
Stroke Length	254	254					Kilometers Today	200 @	\$0.85	\$170.00			
M3/Stroke	0.0139	0.0139					Vehicle Plate #s						
Stroke Rate	108						VTE 581	YRA 333	Daily Total	\$9,552.50			
Volume	1.5012	0					YVJ 580		Accumulated	\$127,876.50			
Mud Record		1.50 m3/min											
Type	Invert	Downhole Motor Record				Jars							
Weight	1045	Run	Vendor	Serial Number		Daily		Run		Well	Hours	Serial Number	
Viscosity	69					Circ	Drill	Total	Circ	Drill	Total		
Water Loss		1	SLB	675A 24004		5.00	17.75	22.75	8.00	27.50	35.50	110570	
pH													
Sand													
Temperature	35												
BHA # 4		BHA #				Wellsite Inventory							
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number			
1/4" DSX 146GWJ (3X15.9 & 3X9	REED	106998	0.25					8" PDM	National	3111-80016			
3/4" 7/8 5.0 XP w/stab set @ 1.8	Schlumberger	675A 24004	7.77					7.75" PDM	National	775-77197-24			
6 3/4" NM Float Sub	Schlumberger	2317102	0.79					7.75" PDM	National	775-77198-24			
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71					8" Bell Sub	Schlumberger	1220360			
6 3/4" Flex Monel	Marlex	C6646300316	9.45					8" Bell Sub	Schlumberger	3217100			
6 3/4" Flex Monel	Marlex	C6646300317	9.45					6.75" NM Float Sub	Schlumberger	2317102			
5 X 7" D C	AKITA		47.67					6.75" NM Float Sub	Schlumberger	2317106			
7" Jars	Smith	110570	9.61					6.75" NM UBHO	Schlumberger	2417113			
4 X 7" DC	AKITA		38.34					6.75" NM UBHO	Schlumberger	3417105			
X/O	AKITA		1.22					6.75" Flex Monel	Marlex	30-0316			
21 X 5" HWDP	AKITA		195.19					6.75" Flex Monel	Marlex	30-0317			
5" DP to Surface	AKITA							6.75" Flex Pony Monel	Marlex	2676			
								6.75" Flex Pony Monel	Marlex	9147			
								6.75" X/O	Schlumberger	1217136			
								6.75" X/O	Schlumberger	2217154			
								6.75" X/O	Schlumberger	1215902			
								6.75" X/O	Schlumberger	2217106			
									Schlumberger	11622R			
									Schlumberger	5905H90			
									Schlumberger	N5662R			
									Schlumberger	1405H90			
									National				
									National				
Total Length				320.45	Total Length								
Personnel													
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man: Mike Berg/Al Curtis/John Spear				Phone No: 1-403-699-2886					
Alternate:		Alternate:											
Night DD:	Clint Chase	Night MWD:	Jong Wan Yoo										
Alternate:		Alternate:											
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature									

Schlumberger

Drilling and Measurements

Daily Service Report

January 27, 2004

Job Information										Day 18					
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400							
Well Name: Chevron at Liard 3K-29				Rig: Akita #48				Job Number: 40009921							
Drilling Record		Time Record				Cost Estimate									
Bit Number	4	Hrs	From	To	Code	Description	Description	Unit	Price	Cost					
Bit Size	222 mm	0.25	0:00	0:15	21	Safety meeting	DD Supervision		\$775						
Bit Type	DSX146GWJ	6.25	0:15	6:30	2	Drill from 1266m to 1352m	MWD Supervision		\$575						
Jets (mm)	15.9 15.9 15.9 9.5 9.5 9.5	1.25	6:30	7:45	10	Dev survey	PowerDrive Flat Rate		\$28,000						
TFA (mm2)	808	0.25	7:45	8:00	7	Rig Service	Flat Rate Operating	1 @	\$8,700	\$8,700.00					
Depth In	1266.00	0.25	8:00	8:15	21	Safety meeting	PowerDrive Non Productive Rate		\$17,000						
Depth Out	1573.00	5.50	8:15	13:45	2	Drill from 1352m to 1476	Gamma Ray Operating		\$950						
Meters	307.00	0.25	13:45	14:00	7	Rig Service	Gamma Ray Standby		\$0						
Hours	18.50	2.00	14:00	16:00	10	Dev survey	E-Pulse Operating								
ROP (m/hr)	16.59	0.25	16:00	16:15	21	Safety meeting	E-Pulse Standby								
RPM	110/25	6.75	16:15	23:00	2	Drill from 1476m to 1573m	Slimpulse MWD Monitoring		\$3,500						
WOB	4	0.75	23:00	23:45	10	Dev survey	Slimpulse Standby		n/c						
PP On	10700	0.25	23:45	0:00	7	Rig Service	APWD Operating								
PP Off	7800						XP/AD motor premium	22.50 @	\$30	\$675.00					
String Weight	79.0						Trucking Ticket No.								
PU Weight	87.0														
SO weight	71.0														
Pump Data															
Manufacturer	National	National					Tool Failure Credit					-\$350			
Model	10-P-130	10-P130					Thread Inspection					\$31			
Tri/Duplex	Triplex	Triplex					Motor Thread Inspection					\$300			
Liner Size	152	152					Motor Reline * \$US								
Stroke Length	254	254					Substance					\$75			
M3/Stroke	0.0139	0.0139	Total Hrs 24.00				Kilometers Today					200 @ \$0.85 \$170.00			
Stroke Rate	108		Comments				Vehicle Plate #'s								
Volume	1.5012	0					VTE 581		YRA 333	Daily Total		\$9,545.00			
Mud Record		1.50 m3/min						YWJ 580		Accumulated		\$137,421.50			
Type		Invert		Downhole Motor Record				Jars							
Weight	1035	Run	Vendor	Serial Number	Daily			Run			Well			Hours	Serial Number
Viscosity	67				Circ	Drill	Total	Circ	Drill	Total	Circ	Drill	Total		
Water Loss		1	SLB	675A 24004	4.00	18.50	22.50	12.00	46.00	58.00	12.00	46.00	58.00		
pH															
Sand															
Temperature	57														
BHA # 4				BHA #				Wellsite Inventory							
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number					
4" DSX 146GWJ (3X15.9 & 3X9)	REED	106998	0.25					8" PDM	National	3111-80016					
3/4" 7/8 5.0 XP w/stab set @ 1.8	Schlumberger	675A 24004	7.77					7.75" PDM	National	775-77197-24					
6 3/4" NM Float Sub	Schlumberger	2317102	0.79					7.75" PDM	National	775-77198-24					
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71					8" Bell Sub	Schlumberger	1220360					
6 3/4" Flex Monel	Marlex	C6646300316	9.45					8" Bell Sub	Schlumberger	3217100					
6 3/4" Flex Monel	Marlex	C6646300317	9.45					6.75" NM Float Sub	Schlumberger	2317102					
5 X 7" D C	AKITA		47.67					6.75" NM Float Sub	Schlumberger	2317106					
7" Jars	Smith	110570	9.61					6.75" NM UBHO	Schlumberger	2417113					
4 X 7" DC	AKITA		38.34					6.75" NM UBHO	Schlumberger	3417105					
X/O	AKITA		1.22					6.75" Flex Monel	Marlex	30-0316					
21 X 5" HWDP	AKITA		195.19					6.75" Flex Monel	Marlex	30-0317					
5" DP to Surface	AKITA							6.75" Flex Pony Monel	Marlex	2676					
								6.75" Flex Pony Monel	Marlex	9147					
								6.75" XJO	Schlumberger	1217136					
								6.75" XJO	Schlumberger	2217154					
								6.75" XJO	Schlumberger	1215902					
								6.75" XJO	Schlumberger	2217106					
									Schlumberger	11622R					
									Schlumberger	5905H90					
									Schlumberger	N5662R					
									Schlumberger	1405H90					
									National						
									National						
Total Length				320.45	Total Length										
Personnel															
Lead DD:	Arlen Yakimchuk			Lead MWD:	Paul Hardwick			Co.Man:	Mike Berg/Al Curtis/John Spear			Phone No:	1-403-699-2886		
Alternate:				Alternate:											
Night DD:	Clint Chase			Night MWD:	Jong Wan Yoo										
Alternate:				Alternate:											
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature											



Drilling and Measurements

Daily Service Report

January 28, 2004

Job Information										Day 19	
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400			
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921			
Drilling Record		Time Record				Cost Estimate					
Bit Number	4	Hrs	From	To	Code	Description	Description	Unit	Price	Cost	
Bit Size	222 mm	1.25	0:00	1:15	2	Drill from 1573m to 1610m	DD Supervision		\$775		
Bit Type	DSX146GWJ	0.75	1:15	2:00	10	Dev survey	MWD Supervision		\$575		
Jets (mm)	15.9 15.9 15.9 9.5 9.5 9.5	0.25	2:00	2:15	22	B.O.P drill	PowerDrive Flat Rate		\$28,000		
TFA (mm2)	808	4.50	2:15	6:45	2	Drill from 1610m to 1667m	Flat Rate Operating	1 @	\$8,700	\$8,700.00	
Depth In	1573.00	1.00	6:45	7:45	10	Dev survey	PowerDrive Non Productive Rate		\$17,000		
Depth Out	1780.00	0.25	7:45	8:00	7	Rig Service	Gamma Ray Operating		\$950		
Meters	207.00	0.25	8:00	8:15	21	Safety meeting	Gamma Ray Standby		\$0		
Hours	14.75	9.00	8:15	17:15	2	Drill from 1667m to 1780m	E-Pulse Operating				
ROP (m/hr)	14.03	0.50	17:15	17:45	10	Dev survey	E-Pulse Standby				
RPM	110/25	0.25	17:45	18:00	7	Rig Service	Slimpulse MWD Monitoring		\$3,500		
WOB	5	0.75	18:00	18:45	5	Circ. P.O.O.H	Slimpulse Standby		n/c		
PP On	10000	1.25	18:45	20:00	6	Flow check	APWD Operating				
PP Off	8000	0.25	20:00	20:15	21	Safety meeting	XPIAD motor premium	14.75 @	\$30	\$442.50	
String Weight	85.0	2.75	20:15	23:00	6	P.O.O.H	Trucking Ticket No.				
PU Weight	95.0	0.25	23:00	23:15	21	Safety meeting					
SO weight	78.0	0.25	23:15	23:30	7	Rig Service					
Pump Data		0.50	23:30	0:00	9	Cut drill line	Tool Failure Credit		-\$350		
Manufacturer	National	National									
Model	10-P-130	10-P130					Thread Inspection		\$31		
Tri/Duplex	Triplex	Triplex					Motor Thread Inspection		\$300		
Liner Size	152	152					Motor Reline * \$US				
Stroke Length	254	254					Subsistence		\$75		
M3/Stroke	0.0139	0.0139					Kilometers Today	200 @	\$0.85	\$170.00	
Stroke Rate	100						Vehicle Plate #'s				
Volume	1.39	0					VTE 581	YRA 333	Daily Total	\$9,312.50	
Mud Record		1.39 m3/min					YWJ 580		Accumulated	\$146,734.00	
Type	Invert										
Weight	1030										
Viscosity	51										
Water Loss											
pH											
Sand											
Temperature	57										
BHA # 4		Downhole Motor Record				Jars					
Description	Vendor	Serial Number	Length								
4" DSX 146GWJ (3X15.9 & 3X9	REED	106998	0.25								
3/4" 7/8 5.0 XP w/stab set @ 1.8	Schlumberger	675A 24004	7.77								
6 3/4" NM Float Sub	Schlumberger	2317102	0.79								
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71								
6 3/4" Flex Monel	Marlex	C6646300316	9.45								
6 3/4" Flex Monel	Marlex	C6646300317	9.45								
5 X 7" D C	AKITA		47.67								
7" Jars	Smith	110570	9.61								
4 X 7" DC	AKITA		38.34								
X/O	AKITA		1.22								
21 X 5" HWDP	AKITA		195.19								
5" DP to Surface	AKITA										
BHA #		Wellsite Inventory									
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number	
8" PDM	National			8" PDM				8" PDM	National	3111-80016	
7.75" PDM	National			7.75" PDM				7.75" PDM	National	775-77197-24	
7.75" PDM	National			7.75" PDM				7.75" PDM	National	775-77198-24	
8" Bell Sub	Schlumberger			8" Bell Sub				8" Bell Sub	Schlumberger	1220360	
8" Bell Sub	Schlumberger			8" Bell Sub				8" Bell Sub	Schlumberger	3217100	
6.75" NM Float Sub	Schlumberger			6.75" NM Float Sub				6.75" NM Float Sub	Schlumberger	2317102	
6.75" NM Float Sub	Schlumberger			6.75" NM Float Sub				6.75" NM Float Sub	Schlumberger	2317106	
6.75" NM UBHO	Schlumberger			6.75" NM UBHO				6.75" NM UBHO	Schlumberger	2417113	
6.75" NM UBHO	Schlumberger			6.75" NM UBHO				6.75" NM UBHO	Schlumberger	3417105	
6.75" Flex Monel	Marlex			6.75" Flex Monel				6.75" Flex Monel	Marlex	30-0316	
6.75" Flex Monel	Marlex			6.75" Flex Monel				6.75" Flex Monel	Marlex	30-0317	
6.75" Flex Pony Monel	Marlex			6.75" Flex Pony Monel				6.75" Flex Pony Monel	Marlex	2676	
6.75" Flex Pony Monel	Marlex			6.75" Flex Pony Monel				6.75" Flex Pony Monel	Marlex	9147	
6.75" X/O	Schlumberger			6.75" X/O				6.75" X/O	Schlumberger	1217136	
6.75" X/O	Schlumberger			6.75" X/O				6.75" X/O	Schlumberger	2217154	
6.75" X/O	Schlumberger			6.75" X/O				6.75" X/O	Schlumberger	1215902	
6.75" X/O	Schlumberger			6.75" X/O				6.75" X/O	Schlumberger	2217106	
	Schlumberger								Schlumberger	11622R	
	Schlumberger								Schlumberger	5905H90	
	Schlumberger								Schlumberger	N5662R	
	Schlumberger								Schlumberger	1405H90	
	National								National		
	National								National		
Total Length		320.45				Total Length					
Personnel											
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man: Mike Berg/Al Curtis/John Spear		Phone No: 1-403-699-2886					
Alternate:		Alternate:									
Night DD:	Clint Chase	Night MWD:	Jong Wan Yoo								
Alternate:		Alternate:									
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature							

Schlumberger

Drilling and Measurements

Daily Service Report

January 29, 2004

Job Information										Day 20									
Company: Chevron Canada Resources					Location: 3K-29					AFE Number: RWWNC-R3004-400									
Well Name: Chevron et al Liard 3K-29					Rig: Akita #48					Job Number: 40009921									
Drilling Record		Time Record				Cost Estimate													
Bit Number	4	Hrs	From	To	Code	Description	Description	Unit	Price	Cost									
Bit Size	222 mm	0.50	0:00	0:30	9	Cut drill line	DD Supervision		\$775										
Bit Type	DSX146GWJ	0.25	0:30	0:45	7	Rig Service	MWD Supervision		\$575										
Jets (mm)	15.9 15.9 15.9 9.5 9.5 9.5	3.25	0:45	4:00	6	R.I.H	PowerDrive Flat Rate		\$28,000										
TFA (mm2)	808	0.50	4:00	4:30	3	Wash to bottom	Flat Rate Operating	1 @	\$8,700	\$8,700.00									
Depth In	1780.00	0.25	4:30	4:45	10	Dev survey	PowerDrive Non Productive Rate		\$17,000										
Depth Out	1970.00	2.50	4:45	7:15	2	Drill from 1780m to 1800m	Gamma Ray Operating		\$950										
Meters	190.00	0.75	7:15	8:00	10	Dev survey	Gamma Ray Standby		\$0										
Hours	16.50	0.25	8:00	8:15	21	Safety meeting	E-Pulse Operating												
ROP (m/hr)	11.52	11.00	8:15	19:15	2	Drill from 1800m to 1912m	E-Pulse Standby												
RPM	110/25	0.50	19:15	19:45	10	Dev survey	Slimpulse MWD Monitoring		\$3,500										
WOB	5	0.25	19:45	20:00	7	Rig Service	Slimpulse Standby		n/c										
PP On	10500	0.25	20:00	20:15	21	Safety meeting	APWD Operating												
PP Off	8000	3.00	20:15	23:15	2	Drill From 1912m to 1970m	XP/AD motor premium	18.50 @	\$30	\$555.00									
String Weight	95.0	0.25	23:15	23:30	7	Rig Service	Trucking Ticket No.												
PU Weight	105.0	0.50	23:30	0:00	10	Dev survey													
SO weight	85.0																		
Pump Data										Tool Failure Credit									
Manufacturer	National	National																	
Model	10-P-130	10-P130																	
Tri/Duplex	Triplex	Triplex																	
Liner Size	152	152																	
Stroke Length	254	254																	
M3/Stroke	0.0139	0.0139	Total Hrs	24.00															
Stroke Rate	105		Comments																
Volume	1.4595	0																	
Mud Record		1.46 m3/min								VTE 581 YRA 333 Daily Total \$9,425.00									
										YVJ 580 Accumulated \$156,159.00									
Type	Invert	Downhole Motor Record								Jars									
Weight	1030	Run	Vendor	Serial Number	Circ	Drill	Total	Circ	Drill	Total	Circ	Drill	Total						
Viscosity	51																		
Water Loss		1	SLB	675A 24004	2.00	16.50	18.50	17.00	77.25	94.25	17.00	77.25	94.25						
pH																			
Sand																			
Temperature	69																		
BHA # 4						BHA #				Wellsite Inventory									
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number									
4" DSX 146GWJ (3X15.9 & 3X9)	REED	106998	0.25					8" PDM	National	3111-80016									
3/4" 7/8 5.0 XP w/stab set @ 1.8	Schlumberger	675A 24004	7.77					7.75" PDM	National	775-77197-24									
6 3/4" NM Float Sub	Schlumberger	2317102	0.79					7.75" PDM	National	775-77198-24									
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71					8" Bell Sub	Schlumberger	1220360									
6 3/4" Flex Monel	Marlex	C6646300316	9.45					8" Bell Sub	Schlumberger	3217100									
6 3/4" Flex Monel	Marlex	C6646300317	9.45					6.75" NM Float Sub	Schlumberger	2317102									
5 X 7" D C	AKITA		47.67					6.75" NM Float Sub	Schlumberger	2317106									
7" Jars	Smith	110570	9.61					6.75" NM UBHO	Schlumberger	2417113									
4 X 7" DC	AKITA		38.34					6.75" NM UBHO	Schlumberger	3417105									
X/O	AKITA		1.22					6.75" Flex Monel	Marlex	30-0316									
21 X 5" HWDP	AKITA		195.19					6.75" Flex Monel	Marlex	30-0317									
5" DP to Surface	AKITA							6.75" Flex Pony Monel	Marlex	2676									
								6.75" Flex Pony Monel	Marlex	9147									
								6.75" X/O	Schlumberger	1217136									
								6.75" X/O	Schlumberger	2217154									
								6.75" X/O	Schlumberger	1215902									
								6.75" X/O	Schlumberger	2217106									
									Schlumberger	11622R									
									Schlumberger	5905H90									
									Schlumberger	N5662R									
									Schlumberger	1405H90									
									National										
									National										
Total Length				320.45	Total Length														
Personnel																			
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man:	Mike Berg/Al Curtis/John Spear	Phone No:	1-403-699-2886												
Alternate:		Alternate:																	
Night DD:	Clint Chase	Night MWD:	Jong Wan Yoo																
Alternate:		Alternate:																	
Field Phone No:				1-403-699-2887 / 860-4437	Company Representatives Signature														



Drilling and Measurements

Daily Service Report

January 30, 2004

Job Information										Day 21			
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400					
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921					
Drilling Record		Time Record				Cost Estimate							
Bit Number	4	Hrs	From	To	Code	Description	Description	Unit	Price	Cost			
Bit Size	222 mm	4.00	0.00	4.00	2	Drill from 1970m to 2017m	DD Supervision		\$775				
Bit Type	DSX146GWJ	0.75	4.00	4.45	10	Dev survey	MWD Supervision		\$575				
Jets (mm)	15.9 15.9 15.9 9.5 9.5 9.5	0.25	4.45	5.00	7	Rig Service	PowerDrive Flat Rate		\$28,000				
TFA (mm2)	808	2.25	5.00	7.15	3	Drill 2017m to 2047m	Flat Rate Operating	1 @	\$8,700	\$8,700.00			
Depth In	1970.00	0.75	7.15	8.00	10	Dev survey	PowerDrive Non Productive Rate		\$17,000				
Depth Out	2202.00	0.25	8.00	8.15	21	Safety meeting	Gamma Ray Operating		\$950				
Meters	232.00	11.00	8.15	19.15	2	Drill from 2047m to 2161m	Gamma Ray Standby		\$0				
Hours	17.75	0.50	19.15	19.45	10	Dev survey	E-Pulse Operating						
ROP (m/hr)	13.07	0.25	19.45	20.00	7	Rig Service	E-Pulse Standby						
RPM	110/25	0.25	20.00	20.15	21	Rig Service	Slimpulse MWD Monitoring		\$3,500				
WOB	5	2.75	20.15	23.00	2	Drill from 2161m 2202m	Slimpulse Standby		n/c				
PP On	10500	0.25	23.00	23.15	10	Dev survey	APWD Operating						
PP Off	8000	0.75	23.15	0.00	7	Rig Service	XP/AD motor premium	20.00 @	\$30	\$600.00			
String Weight	96.0						Trucking Ticket No.						
PU Weight	106.0												
SO weight	88.0												
Pump Data						Tool Failure Credit					-\$350		
Manufacturer	National	National											
Model	10-P-130	10-P130											
Tri/Duplex	Triplex	Triplex											
Liner Size	152	152											
Stroke Length	254	254											
M3/Stroke	0.0139	0.0139											
Stroke Rate	105												
Volume	1.4595	0											
Mud Record		1.46 m3/min											
Type	Invert	Downhole Motor Record											
Weight	1065	Run	Vendor	Serial Number		Daily		Run		Well	Hours	Serial Number	
Viscosity	52					Circ	Drill	Total	Circ	Drill	Total		
Water Loss		1	SLB	675A 24004		2.25	17.75	20.00	19.25	95.00	114.25	114.25	110570
pH													
Sand													
Temperature	69												
BHA # 4						BHA #				Wellsite Inventory			
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number			
14" DSX 146GWJ (3X15.9 & 3X9)	REED	106998	0.25					8" PDM	National	3111-80016			
3/4" 7/8 5.0 XP w/stab set @ 1.8	Schlumberger	675A 24004	7.77					7.75" PDM	National	775-77197-24			
6 3/4" NM Float Sub	Schlumberger	2317102	0.79					7.75" PDM	National	775-77198-24			
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71					8" Bell Sub	Schlumberger	1220360			
6 3/4" Flex Monel	Marlex	C6646300316	9.45					8" Bell Sub	Schlumberger	3217100			
6 3/4" Flex Monel	Marlex	C6646300317	9.45					6.75" NM Float Sub	Schlumberger	2317102			
5 X 7" D C	AKITA		47.67					6.75" NM Float Sub	Schlumberger	2317106			
7" Jars	Smith	110570	9.61					6.75" NM UBHO	Schlumberger	2417113			
4 X 7" DC	AKITA		38.34					6.75" NM UBHO	Schlumberger	3417105			
X/O	AKITA		1.22					6.75" Flex Monel	Marlex	30-0316			
21 X 5" HWDP	AKITA		195.19					6.75" Flex Monel	Marlex	30-0317			
5" DP to Surface	AKITA							6.75" Flex Pony Monel	Marlex	2676			
								6.75" Flex Pony Monel	Marlex	9147			
								6.75" X/O	Schlumberger	1217136			
								6.75" X/O	Schlumberger	2217154			
								6.75" X/O	Schlumberger	1215902			
								6.75" X/O	Schlumberger	2217106			
									Schlumberger	116222R			
									Schlumberger	5905H90			
									Schlumberger	N5662R			
									Schlumberger	1405H90			
									National				
									National				
Total Length				320.45	Total Length								
Personnel													
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man: Mike Berg/Al Curtis/John Spear				Phone No: 1-403-699-2886					
Alternate:		Alternate:											
Night DD:	Clint Chase	Night MWD:	Jong Wan Yoo										
Alternate:		Alternate:											
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature									



January 31, 2004

CFS 13.8



Drilling and Measurements

Daily Service Report

February 1, 2004

Job Information										Day 23	
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400			
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921			
Drilling Record		Time Record				Cost Estimate					
Bit Number	5	Hrs	From	To	Code	Description	Description	Unit	Price	Cost	
Bit Size	222 mm	0.25	0:00	0:15	21	Safety meeting	DD Supervision		\$775		
Bit Type	TYD51XM	2.75	0:15	3:00	20	Dir. Work	MWD Supervision		\$575		
Jets (mm)	11.1 11.1 11.1	5.00	3:00	8:00	6	R.I.H	PowerDrive Flat Rate		\$28,000		
TFA (mm2)	290	0.25	8:00	8:15	21	Safety meeting	Flat Rate Operating	1 @	\$8,700	\$8,700.00	
Depth In	2361.00	2.25	8:15	10:30	6	R.I.H	PowerDrive Non Productive Rate		\$17,000		
Depth Out	2424.00	0.50	10:30	11:00	22	Wash to bottom	Gamma Ray Operating		\$950		
Meters	63.00	8.25	11:00	19:15	2	Drill from 2361m to 2400	Gamma Ray Standby		\$0		
Hours	11.00	0.25	19:15	19:30	7	Rig Service	E-Pulse Operating				
ROP (m/hr)	5.73	0.75	19:30	20:15	10	Dev survey	E-Pulse Standby				
RPM	110/25	0.25	20:15	20:30	7	Rig Service	Slimpulse MWD Monitoring		\$3,500		
WOB	22/37	0.25	20:30	20:45	21	Safety meeting	Slimpulse Standby		n/c		
PP On	12500	2.75	20:45	23:30	2	Drill 2400m to 2424m	APWD Operating				
PP Off	10500	0.25	23:30	23:45	7	Rig Service	XP/AD motor premium	12.00 @	\$30	\$360.00	
String Weight	108.0	0.25	23:45	0:00	10	Dev survey	Trucking Ticket No.				
PU Weight	126.0										
SO weight	90.0										
Pump Data											
Manufacturer	National	National									
Model	10-P-130	10-P130									
Tri/Duplex	Triplex	Triplex									
Liner Size	152	152									
Stroke Length	254	254									
M3/Stroke	0.0139	0.0139									
Stroke Rate	105										
Volume	14595	0									
Mud Record		1.46 m3/min									
Type	Invert										
Weight	1065										
Viscosity	50										
Water Loss											
pH											
Sand											
Temperature	84										
BHA # 5						BHA #					
Description	Vendor	Serial Number	Length			Description	Vend	SN	Length		
8 3/4" TD51XM	Reed		0.25			8" PDM	National		3111-80016		
6 3/4" 7/8 S.O XP set @ 1.5	Schlumberger	675A 2498	7.81			7.75" PDM	National		775-77197-24		
6 3/4" NM Float Sub	Schlumberger	2317102	0.79			7.75" PDM	National		775-77198-24		
6 3/4" Pony Monel	Marlex	C650102676	2.93			8" Bell Sub	Schlumberger		1220360		
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71			8" Bell Sub	Schlumberger		3217100		
6 3/4" Flex Monel	Marlex	C6646300316	9.45			6.75" NM Float Sub	Schlumberger		2317102		
6 3/4" Flex Monel	Marlex	C6646300317	9.45			6.75" NM Float Sub	Schlumberger		2317106		
3 X 7" D C	AKITA		28.54			6.75" NM UBHO	Schlumberger		2417113		
7" Jars	Smith	110570	9.61			6.75" NM UBHO	Schlumberger		3417105		
X/O	AKITA		1.22			6.75" Flex Monel	Marlex		30-0316		
27 X 5" HWDP	AKITA		250.98			6.75" Flex Monel	Marlex		30-0317		
5" DP to Surface	AKITA					6.75" Flex Pony Monel	Marlex		2676		
						6.75" Flex Pony Monel	Marlex		9147		
						6.75" X/O	Schlumberger		1217136		
						6.75" X/O	Schlumberger		2217154		
						6.75" X/O	Schlumberger		1215902		
						6.75" X/O	Schlumberger		2217106		
							Schlumberger		11622R		
							Schlumberger		5905H90		
							Schlumberger		N5662R		
							Schlumberger		1405H90		
							National				
							National				
Personnel											
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man: Mike Berg/Al Curtis/John Spear		Phone No: 1-403-699-2886					
Alternate:		Alternate:									
Night DD:	Clint Chase	Night MWD:	Jong Wan Yoo								
Alternate:		Alternate:									
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature							



Drilling and Measurements

Daily Service Report

February 2, 2004

Job Information										Day 24		
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400				
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921				
Drilling Record		Time Record				Cost Estimate						
Bit Number	5	Hrs	From	To	Code	Description	Description	Unit	Price	Cost		
Bit Size	222 mm	7.00	0:00	7:00	2	Drill from 2424m to 2458m	DD Supervision		\$775			
Bit Type	TD51XM	0.25	7:00	7:15	7	Rig Service	MWD Supervision		\$575			
Jets (mm)	11.1 11.1 11.1	0.75	7:15	8:00	10	Dev survey	PowerDrive Flat Rate		\$28,000			
TFA (mm2)	290	0.25	8:00	8:15	21	Safety meeting	Flat Rate Operating	1 @	\$8,700	\$8,700.00		
Depth In	2424.00	10.50	8:15	18:45	2	Drill from 2458m to 2514m	PowerDrive Non Productive Rate		\$17,000			
Depth Out	2538.00	1.00	18:45	19:45	10	Dev survey	Gamma Ray Operating		\$950			
Meters	114.00	0.25	19:45	20:00	7	Rig Service	Gamma Ray Standby		\$0			
Hours	20.25	0.25	20:00	20:15	21	Safety meeting	E-Pulse Operating					
ROP (m/hr)	5.63	2.75	20:15	23:00	2	Drill from 2514m to 2538m	E-Pulse Standby					
RPM	110/25	0.75	23:00	23:45	10	Dev survey	Slimpulse MWD Monitoring		\$3,500			
WOB	22/37	0.25	23:45	0:00	7	Rig Service	Slimpulse Standby		n/c			
PP On	13000						APWD Operating					
PP Off	11000						XP/AD motor premium	22.75 @	\$30	\$682.50		
String Weight	108.0						Trucking Ticket No.					
PU Weight	123.0											
SO weight	95.0											
Pump Data						Tool Failure Credit						
Manufacturer	National	National										
Model	10-P-130	10-P-130										
Tri/Duplex	Triplex	Triplex										
Liner Size	152	152										
Stroke Length	254	254										
M3/Stroke	0.0139	0.0139										
Stroke Rate	105											
Volume	1.4595	0										
Mud Record		1.46 m3/min				Total Hrs 24.00						
Type		Invert	Downhole Motor Record				Jars					
Weight	1080	Run	Vendor	Serial Number								
Viscosity	49											
Water Loss		1	SLB	675A 2498								
pH												
Sand												
Temperature	90											
BHA # 5		BHA #				Wellsite Inventory						
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number		
8 3/4" TD51XY	Reed		0.25					8" PDM	National	3111-80016		
6 3/4" 7/8 5.0 XP set @ 1.5	Schlumberger	675A 2498	7.81					7.75" PDM	National	775-77197-24		
6 3/4" Poniel Monel	Marlex	C650102676	2.93					7.75" PDM	National	775-77198-24		
6 3/4" NM Float Sub	Schlumberger	2317102	0.79					8" Bell Sub	Schlumberger	1220360		
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71					8" Bell Sub	Schlumberger	3217100		
6 3/4" Flex Monel	Marlex	C6646300316	9.45					6.75" NM Float Sub	Schlumberger	2317102		
6 3/4" Flex Monel	Marlex	C6646300317	9.45					6.75" NM Float Sub	Schlumberger	2317106		
3 X 7" D C	AKITA		28.54					6.75" NM UBHO	Schlumberger	2417113		
7" Jars	Smith	110570	9.61					6.75" NM UBHO	Schlumberger	3417105		
X/O	AKITA		1.22					6.75" Flex Monel	Marlex	30-0316		
27 X 5" HWDP	AKITA		250.98					6.75" Flex Monel	Marlex	30-0317		
5" DP to Surface	AKITA							6.75" Flex Pony Monel	Marlex	2676		
								6.75" Flex Pony Monel	Marlex	9147		
								6.75" X/O	Schlumberger	1217136		
								6.75" X/O	Schlumberger	2217154		
								6.75" X/O	Schlumberger	1215902		
								6.75" X/O	Schlumberger	2217106		
									Schlumberger	11622R		
									Schlumberger	5905H90		
									Schlumberger	N5662R		
									Schlumberger	1405H90		
									National			
									National			
Total Length		321.74				Total Length						
Personnel												
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man:	Mike Bryson/Al Curtis/John Spe	Phone No:	1-403-699-2886					
Alternate:		Alternate:										
Night DD:	Clint Chase	Night MWD:	Jong Wan Yoo									
Alternate:		Alternate:										
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature								



Drilling and Measurements

Daily Service Report

February 3, 2004

Job Information										Day 25			
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400					
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921					
Drilling Record		Time Record				Cost Estimate							
Bit Number	5	Hrs	From	To	Code	Description	Description	Unit	Price	Cost			
Bit Size	222 mm	7.00	0.00	7.00	2	Drill from 2538m to	DD Supervision		\$775				
Bit Type	TYD51XM	0.25	7.00	7.15	7	Rig Service	MWD Supervision		\$575				
Jets (mm)	11.1 11.1 11.1	0.75	7.15	8.00	10	Dev survey	PowerDrive Flat Rate		\$28,000				
TFA (mm)	290	0.25	8.00	8.15	21	Safety meeting	Flat Rate Operating	1 @	\$8,700	\$8,700.00			
Depth In	2361.00	6.75	8.15	15.00	2	Drill From 2583m to 2634m	PowerDrive Non Productive Rate		\$17,000				
Depth Out	2641.00	0.75	15.00	15.45	10	Surveys	Gamma Ray Operating		\$950				
Meters	280.00	0.25	15.45	16.00	7	Rig Service	Gamma Ray Standby		\$0				
Hours	45.00	8.00	16.00	0.00	6	POOH	E-Pulse Operating						
ROP (m/hr)	6.22						E-Pulse Standby						
RPM	110/25						Slimpulse MWD Monitoring		\$3,500				
WOB	22/37						Slimpulse Standby		n/c				
PP On	13000						APWD Operating						
PP Off	11000						XPIAD motor premium	15.25 @	\$30	\$457.50			
String Weight	108.0						Trucking Ticket No.						
PU Weight	123.0												
SO weight	95.0												
Pump Data													
Manufacturer	National	National					Tool Failure Credit		-\$350				
Model	10-P-130	10-P130					Motor Reline correction		\$4,980	\$4,980.00			
Tri/Duplex	Triplex	Triplex					Thread Inspection		\$31				
Liner Size	152	152					Motor Thread Inspection		\$300				
Stroke Length	254	254					Motor Reline * \$US		\$7,640				
M3/Stroke	0.0139	0.0139					Subsistence		\$75				
Stroke Rate	105						Kilometers Today	200 @	\$0.85	\$170.00			
Volume	1.4595	0					Vehicle Plate #'s						
Mud Record		1.46 m3/min											
Type	Invert	Downhole Motor Record											
Weight	1080	Run	Vendor	Serial Number	Daily			Run	Well	Hours	Serial Number		
Viscosity	49				Circ	Drill	Total	Circ	Drill	Total			
Water Loss		1	SLB	675A 2498							245.50	110570	
pH													
Sand													
Temperature	90												
BHA # 5						BHA #				Wellsite Inventory			
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number			
8 3/4" TD51XY	Reed		0.25					8" PDM	National	3111-80016			
6 3/4" 7/8 5.0 XP set @ 1.5	Schlumberger	675A 2498	7.81					7.75" PDM	National	775-77197-24			
6 3/4" Ponel Monel	Marlex	C650102676	2.93					7.75" PDM	National	775-77198-24			
6 3/4" NM Float Sub	Schlumberger	2317102	0.79					8" Bell Sub	Schlumberger	1220360			
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71					8" Bell Sub	Schlumberger	3217100			
6 3/4" Flex Monel	Marlex	C6646300316	9.45					6.75" NM Float Sub	Schlumberger	2317102			
6 3/4" Flex Monel	Marlex	C6646300317	9.45					6.75" NM Float Sub	Schlumberger	2317106			
3 X 7" D C	AKITA		28.54					6.75" NM UBHO	Schlumberger	2417113			
7" Jars	Smith	110570	9.61					6.75" NM UBHO	Schlumberger	3417105			
X/O	AKITA		1.22					6.75" Flex Monel	Marlex	30-0316			
27 X 5" HWDP	AKITA		250.98					6.75" Flex Monel	Marlex	30-0317			
5" DP to Surface	AKITA							6.75" Flex Pony Monel	Marlex	2676			
								6.75" Flex Pony Monel	Marlex	9147			
								6.75" X/O	Schlumberger	1217136			
								6.75" X/O	Schlumberger	2217154			
								6.75" X/O	Schlumberger	1215902			
								6.75" X/O	Schlumberger	2217106			
									Schlumberger	11622R			
									Schlumberger	5905H90			
									Schlumberger	N5662R			
									Schlumberger	1405H90			
									National				
									National				
Total Length				321.74	Total Length								
Personnel													
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co. Man: Mike Bryson/Al Curtis/John Spe				Phone No: 1-403-699-2886					
Alternate:		Alternate:											
Night DD:	Clint Chase	Night MWD:	Jong Wan Yoo										
Alternate:		Alternate:											
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature									

Job Information										Day 28	
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400			
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921			
Drilling Record		Time Record				Cost Estimate					
Bit Number	6	Hrs	From	To	Code	Description	Description	Unit	Price	Cost	
Bit Size	222 mm	1.75	0:00	1:45	6	P.O.O.H	DD Supervision		\$775		
Bit Type	F2800VPS	3.00	1:45	4:45	20	Dir Work	MWD Supervision		\$575		
Jets (mm)	10.3 10.3 10.3	0.25	4:45	5:00	7	Rig Service	PowerDrive Flat Rate		\$28,000		
TFA (mm2)	250	0.75	5:00	5:45	6	R.I.H	Flat Rate Operating	1 @	\$8,700	\$8,700.00	
Depth In	2641.00	1.25	5:45	7:00	9	Slip/Cut	PowerDrive Non Productive Rate		\$17,000		
Depth Out	2668.00	1.00	7:00	8:00	6	R.I.H	Gamma Ray Operating		\$950		
Meters	27.00	0.25	8:00	8:15	21	Safety meeting	Gamma Ray Standby		\$0		
Hours	4.50	4.25	8:15	12:30	6	Strap In	E-Pulse Operating				
ROP (m/hr)	6.00	5.50	12:30	18:00	3	Wash to bottom	E-Pulse Standby				
RPM	25/110	0.75	18:00	18:45	2	Pattern Bit From 2641m to 2646m	Slimpulse MWD Monitoring		\$3,500		
WOB	20	0.25	18:45	19:00	7	Rig Service	Slimpulse Standby		n/c		
PP On	12000	0.25	19:00	19:15	10	Surveys	APWD Operating				
PP Off	11500	0.75	19:15	20:00	2	Drill From 2646m to 2650m	XP/AD motor premium	5.25 @	\$30	\$157.50	
String Weight	110.0	0.25	20:00	20:15	21	Safety meeting	Trucking Ticket No.				
PU Weight	140.0	3.00	20:15	23:15	2	Drill from 2650m to 2668m					
SO weight	95.0	0.50	23:15	23:45	10	Dev survey					
Pump Data		0.25	23:45	0:00	7	Rig Service	Tool Failure Credit		-\$360		
Manufacturer	National	National					Motor Reline correction		\$12		
Model	10-P-130	10-P-130					Thread Inspection		\$31		
Tri/Duplex	Triplex	Triplex					Motor Thread Inspection	1 @	\$300	\$300.00	
Liner Size	152	152					Motor Reline * \$US	1.00 @	\$12,620	\$12,620.00	
Stroke Length	254	254					Subsistence		\$75		
M3/Stroke	0.0139	0.0139					Kilometers Today	200 @	\$0.85	\$170.00	
Stroke Rate	108		Comments				Vehicle Plate #'s				
Volume	1.5012	0					VTE 581	YRA 333	Daily Total	\$21,947.50	
Mud Record	1.50 m3/min						YWJ 580		Accumulated	\$238,076.50	
Type	Invert	Downhole Motor Record								Jars	
Weight	1065	Run	Vendor	Serial Number		Daily	Run	Well	Hours	Serial Number	
Viscosity	48					Circ Drill Total	Circ Drill Total	Circ Drill Total	250.00	110570	
Water Loss		1	SLB	675A 24-3528		0.75 4.50 5.25	0.75 4.50 5.25	0.75 4.50 5.25			
pH											
Sand											
Temperature	93										
BHA # 5				BHA #				Wellsite Inventory			
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number	
8 3/4" TD51XY	Reed		0.25					8" PDM	National	3111-80016	
6 3/4" 7/8 5.0 XP set @ 1.5	Schlumberger	675A 2498	7.76					7.75" PDM	National	775-77197-24	
6 3/4" Poniel Monel	Marlex	C650102676	2.93					7.75" PDM	National	775-77198-24	
6 3/4" NM Float Sub	Schlumberger	2317102	0.79					8" Bell Sub	Schlumberger	1220360	
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71					8" Bell Sub	Schlumberger	3217100	
6 3/4" Flex Monel	Marlex	C6646300316	9.45					6.75" NM Float Sub	Schlumberger	2317102	
6 3/4" Flex Monel	Marlex	C6646300317	9.45					6.75" NM Float Sub	Schlumberger	2317106	
								6.75" NM UBHO	Schlumberger	2417113	
7" Jars	Smith	110570	9.61					6.75" NM UBHO	Schlumberger	3417105	
X/O	AKITA		1.22					6.75" Flex Monel	Marlex	30-0316	
27 X 5" HWDP	AKITA		250.98					6.75" Flex Monel	Marlex	30-0317	
5" DP to Surface	AKITA							6.75" Flex Pony Monel	Marlex	2676	
								6.75" Flex Pony Monel	Marlex	9147	
								6.75" X/O	Schlumberger	1217136	
								6.75" X/O	Schlumberger	2217154	
								6.75" X/O	Schlumberger	1215902	
								6.75" X/O	Schlumberger	2217106	
									Schlumberger	11622R	
									Schlumberger	5905H90	
									Schlumberger	N5662R	
									Schlumberger	1405H90	
									National		
									National		
Total Length 293.15				Total Length							
Personnel											
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man:	Mike Bryson/AI Curtis/John Spe	Phone No:	1-403-699-2886				
Alternate:		Alternate:									
Night DD:	Clint Chase	Night MWD:	Jong Wan Yoo								
Alternate:		Alternate:									
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature							



Drilling and Measurements

Daily Service Report

February 5, 2004

Job Information										Day 27	
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400			
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921			
Drilling Record		Time Record				Cost Estimate					
Bit Number	6	Hrs	From	To	Code	Description	Description	Unit	Price	Cost	
Bit Size	222 mm	7.25	0:00	7:15	2	Drill From 2668m to 2700m	DD Supervision		\$775		
Bit Type	F28ODVPS	0.50	7:15	7:45	10	Surveys	MWD Supervision		\$575		
Jets (mm)	10.3 10.3 10.3	0.25	7:45	8:00	7	Rig Service	PowerDrive Flat Rate		\$28,000		
TFA (mm2)	250	0.25	8:00	8:15	21	Safety meeting	Flat Rate Operating	1 @	\$8,700	\$8,700.00	
Depth In	2641.00	4.75	8:15	13:00	2	Drill From 2700m to 2731m	PowerDrive Non Productive Rate		\$17,000		
Depth Out	2731.50	0.50	13:00	13:30	10	Surveys	Gamma Ray Operating		\$950		
Meters	90.50	0.25	13:30	13:45	7	Rig Service	Gamma Ray Standby		\$0		
Hours	16.50	1.00	13:45	14:45	5	Circ	E-Pulse Operating				
ROP (m/hr)	5.48	0.50	14:45	15:15	21	Safety meeting	E-Pulse Standby				
RPM	25/110	4.75	15:15	20:00	6	POOH	Slimpulse MWD Monitoring		\$3,500		
WOB	20	0.25	20:00	20:15	21	Safety meeting	Slimpulse Standby		n/c		
PP On	12000	0.75	20:15	21:00	6	POOH	APWD Operating				
PP Off	11500	1.50	21:00	22:30	20	Change Bit & Dial up Motor to 2.12 Deg.	XP/AD motor premium	14.00 @	\$30	\$420.00	
String Weight	110.0	1.50	22:30	0:00	6	RIH	Trucking Ticket No.				
PU Weight	140.0										
SO weight	95.0										
Pump Data						Tool Failure Credit					-\$350
Manufacturer	National	National					Motor Reline correction		\$12		
Model	10-P-130	10-P130					Thread Inspection		\$31		
Tri/Duplex	Triplex	Triplex					Motor Thread Inspection		\$300		
Liner Size	152	152					Motor Reline * \$US		\$12,620		
Stroke Length	254	254					Subsistence		\$75		
M3/Stroke	0.0139	0.0139					Kilometers Today	200 @	\$0.85	\$170.00	
Stroke Rate	108						Vehicle Plate #'s				
Volume	1.5012	0					VTE 581	YRA 333	Daily Total	\$9,290.00	
Mud Record		1.50 m3/min				YWJ 580				Accumulated	\$247,366.50
Type	Invert	Downhole Motor Record				Jars					
Weight	1065	Run	Vendor	Serial Number	Daily			Run	Well	Hours	Serial Number
Viscosity	48				Circ	Drill	Total	Circ	Drill	Total	
Water Loss		1	SLB	675A 24-3528				2.75	16.50	19.25	
pH											
Sand											
Temperature	93										
BHA #6		BHA #				Wellsite Inventory					
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number	
8 3/4" FI28ODVPS	Smith	MRO703	0.25					8" PDM	National	3111-80016	
6 3/4" 7/8 5.0 XP set @ 1.83	Schlumberger	675A -24-3528	7.76					7.75" PDM	National	775-77197-24	
6 3/4 Poneil Monel	Marlex	C650102676	2.93					7.75" PDM	National	775-77198-24	
6 3/4" NM Float Sub	Schlumberger	2317102	0.79					8" Bell Sub	Schlumberger	1220360	
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71					8" Bell Sub	Schlumberger	3217100	
6 3/4" Flex Monel	Marlex	C6646300316	9.45					6.75" NM Float Sub	Schlumberger	2317102	
6 3/4" Flex Monel	Marlex	C6646300317	9.45					6.75" NM Float Sub	Schlumberger	2317106	
7" Jars	Smith	110570	9.61					6.75" NM UBHO	Schlumberger	2417113	
X/O	AKITA		1.22					6.75" NM UBHO	Schlumberger	3417105	
27 X 5" HWDP	AKITA		250.98					6.75" Flex Monel	Marlex	30-0316	
5" DP to Surface	AKITA							6.75" Flex Monel	Marlex	30-0317	
								6.75" Flex Pony Monel	Marlex	2676	
								6.75" Flex Pony Monel	Marlex	9147	
								6.75" X/O	Schlumberger	1217136	
								6.75" X/O	Schlumberger	2217154	
								6.75" X/O	Schlumberger	1215902	
								6.75" X/O	Schlumberger	2217106	
									Schlumberger	11622R	
									Schlumberger	5905H90	
									Schlumberger	N5662R	
									Schlumberger	1405H90	
									National		
									National		
Total Length		293.15		Total Length							
Personnel											
Lead DD:	Arlen Yakimchuk			Lead MWD:	Paul Hardwick			Co.Man: Mike Bryson/AI Curtis/John Spe		Phone No: 1-403-699-2886	
Alternate:				Alternate:							
Night DD:	Clint Chase			Night MWD:	Jong Wan Yoo						
Alternate:				Alternate:							
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature							



Daily Service Report

February 6, 2004

Drilling and Measurements

Job Information										Day 28				
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400						
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921						
Drilling Record		Time Record				Cost Estimate								
Bit Number	7	Hrs	From	To	Code	Description	Description	Unit	Price	Cost				
Bit Size	222 mm	3.00	0:00	3:00	6	R.I.H	DD Supervision		\$775					
Bit Type	TD53AM	0.50	3:00	3:30	22	Wash to bottom	MWD Supervision		\$575					
Jets (mm)	11 11 12	3.75	3:30	7:15	2	Drill from 2731.5 to 2751m	PowerDrive Flat Rate		\$28,000					
TFA (mm2)	303	0.50	7:15	7:45	10	Dev survey	Flat Rate Operating	1 @	\$8,700	\$8,700.00				
Depth In	2731.50	0.25	7:45	8:00	7	Rig Service	PowerDrive Non Productive Rate		\$17,000					
Depth Out	2779.50	0.25	8:00	8:15	21	Safety meeting	Gamma Ray Operating		\$950					
Meters	48.00	2.25	8:15	10:30	2	Drill from 2715 to 2779m	Gamma Ray Standby		\$0					
Hours	6.00	0.50	10:30	11:00	10	Dev survey	E-Pulse Operating							
ROP (m/hr)	8.00	1.25	11:00	12:15	5	Cond. Mud circ. Bottoms up	E-Pulse Standby							
RPM	25/110	5.75	12:15	18:00	6	P.O.O.H	Slimpulse MWD Monitoring		\$3,500					
WOB	20	0.25	18:00	18:15	21	Safety meeting	Slimpulse Standby		n/c					
PP On	12500	0.25	18:15	18:30	7	Rig Service	APWD Operating							
PP Off	12800	1.50	18:30	20:00	6	P.O.O.H	XP/AD motor premium	8.25 @	\$30	\$247.50				
String Weight	112.0	0.25	20:00	20:15	21	Safety meeting	Trucking Ticket No.	11118 1 @	\$4,080	\$4,080.00				
PU Weight	145.0	0.75	20:15	21:00	20	Dir Work								
SO weight	90.0	0.25	21:00	21:15	7	Rig Service								
Pump Data		2.75	21:15	0:00	15	Test man. Rams	Tool Failure Credit		-\$350					
Manufacturer	National						Motor Reline correction		\$12					
Model	10-P-130	10-P130					Thread Inspection		\$31					
Tri/Duplex	Triplex	Triplex					Motor Thread Inspection	1 @	\$300	\$300.00				
Liner Size	152	152					Motor Reline * \$US	1.00 @	\$12,620	\$12,620.00				
Stroke Length	254	254					Subsistence		\$75					
M3/Stroke	0.0139	0.0139					Kilometers Today	200 @	\$0.85	\$170.00				
Stroke Rate	108						Vehicle Plate #s							
Volume	1.5012	0					VTE 581	YRA 333	Daily Total	\$26,117.50				
							YWJ 580		Accumulated	\$273,484.00				
Mud Record		Downhole Motor Record				Jars								
Type	Invert	Run	Vendor	Serial Number		Circ	Drill	Total	Circ	Drill	Total	Hours	Serial Number	
Weight	1065											250.00	110570	
Viscosity	48													
Water Loss		2	SLB	675A-24-3528		2.25	6.00	8.25		5.00	22.50	27.50		
pH		1	SLB	675A-24-3528					2.75	16.50	19.25	16.50	19.25	
Sand														
Temperature	93													
BHA # 7				BHA #				Wellsite Inventory						
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number				
8 3/4" TD53AM	REED	L54361	0.25					8" PDM	National	3111-80016				
6 3/4" 7/8 5.0 XP set @ 2.12	Schlumberger	675A-24-3528	7.76					7.75" PDM	National	775-77197-24				
6 3/4" Ponel Monel	Marlex	C650102676	2.93					7.75" PDM	National	775-77198-24				
6 3/4" NM Float Sub	Schlumberger	2317102	0.79					8" Bell Sub	Schlumberger	1220360				
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71					8" Bell Sub	Schlumberger	3217100				
6 3/4" Flex Monel	Marlex	C6646300316	9.45					6.75" NM Float Sub	Schlumberger	2317102				
6 3/4" Flex Monel	Marlex	C6646300317	9.45					6.75" NM Float Sub	Schlumberger	2317106				
7" Jars	Smith	110570	9.61					6.75" NM UBHO	Schlumberger	2417113				
X/O	AKITA		1.22					6.75" NM UBHO	Schlumberger	3417105				
27 X 5" HWDP	AKITA		250.98					6.75" Flex Monel	Marlex	30-0316				
5" DP to Surface	AKITA							6.75" Flex Monel	Marlex	30-0317				
								6.75" Flex Pony Monel	Marlex	2676				
								6.75" Flex Pony Monel	Marlex	9147				
								6.75" X/O	Schlumberger	1217136				
								6.75" X/O	Schlumberger	2217154				
								6.75" X/O	Schlumberger	1215902				
								6.75" X/O	Schlumberger	2217106				
									Schlumberger	11622R				
									Schlumberger	5905H90				
									Schlumberger	N5662R				
									Schlumberger	1405H90				
									National					
									National					
Total Length				293.15	Total Length									
Personnel														
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man: Mike Bryson/AI Curtis/John Spe				Phone No: 1-403-699-2886						
Alternate:		Alternate:												
Night DD:	Clint Chase	Night MWD:	Jong Wan Yoo											
Alternate:		Alternate:												
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature										

Job Information										Day 29	
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400			
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921			
Drilling Record		Time Record				Cost Estimate					
Bit Number	8	Hrs	From	To	Code	Description	Description	Unit	Price	Cost	
Bit Size	222 mm	5.50	0:00	5:30	15	Pressure test	DD Supervision		\$775		
Bit Type	R31V	0.25	5:30	5:45	22	Install wear bushing	MWD Supervision		\$575		
Jets (mm)	10 10 10	1.25	5:45	7:00	20	Dir Work	PowerDrive Flat Rate		\$28,000		
TFA (mm2)	236	1.00	7:00	8:00	6	R.I.H	Flat Rate Operating	1 @	\$8,700	\$8,700.00	
Depth In	2779.50	0.25	8:00	8:15	21	Safety meeting	PowerDrive Non Productive Rate		\$17,000		
Depth Out	2800.00	1.00	8:15	9:15	6	R.I.H	Gamma Ray Operating		\$950		
Meters	20.50	1.25	9:15	10:30	9	Slip/Cut	Gamma Ray Standby		\$0		
Hours	4.50	0.25	10:30	10:45	7	Rig Service	E-Pulse Operating				
ROP (m/hr)	4.60	4.50	10:45	15:15	6	R.I.H	E-Pulse Standby				
RPM	25/110	2.75	15:15	18:00	2	Drill from 2779.5 to 2791m	Slimpulse MWD Monitoring		\$3,500		
WOB	20	0.25	18:00	18:15	10	Dev survey	Slimpulse Standby		n/c		
PP On	12500	1.75	18:15	20:00	23	Work on top drive	APWD Operating				
PP Off	12800	0.25	20:00	20:15	21	Safety meeting	XP/AD motor premium	5.00 @	\$30	\$150.00	
String Weight	112.0	1.50	20:15	21:45	23	Work on top drive	Trucking Ticket No.		\$4,080		
PU Weight	145.0	1.75	21:45	23:30	2	Drill from 2791m to 2800					
SO weight	90.0	0.25	23:30	23:45	10	Dev survey					
		0.25	23:45	0:00	7	Rig Service	Tool Failure Credit		-\$350		
Pump Data											
Manufacturer	National	National									
Model	10-P-130	10-P130									
Tri/Duplex	Triplex	Triplex									
Liner Size	152	152									
Stroke Length	254	254									
M3/Stroke	0.0139	0.0139	Total Hrs		24.00						
Stroke Rate	108										
Volume	1.5012	0									
Mud Record		1.50 m3/min									
Type	Invert	Downhole Motor Record									
Weight	1075	Run	Vendor	Serial Number	Daily		Run		Well		
Viscosity	52				Circ	Drill	Total	Circ	Drill	Total	
Water Loss		1	SLB	675A 24-3219	0.50	4.50	5.00	0.50	4.50	5.00	
pH											
Sand											
Temperature	96										
BHA # 8		BHA #				Wellsite Inventory					
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number	
8 3/4"			0.25					8" PDM	National	3111-80016	
6 3/4" 7/8 5.0 XP set @ 2.12	Schlumberger	675A -24-3528	7.83					7.75" PDM	National	775-77197-24	
6 3/4" Ponel Monel	Marlex	C650102676	2.93					7.75" PDM	National	775-77198-24	
6 3/4" NM Float Sub	Schlumberger	2317102	0.79					8" Bell Sub	Schlumberger	1220360	
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71					8" Bell Sub	Schlumberger	3217100	
6 3/4" Flex Monel	Marlex	C6646300316	9.45					6.75" NM Float Sub	Schlumberger	2317102	
6 3/4" Flex Monel	Marlex	C6646300317	9.45					6.75" NM Float Sub	Schlumberger	2317106	
X/O	AKITA		1.22					6.75" NM UBHO	Schlumberger	2417113	
HWDP	AKITA							6.75" NM UBHO	Schlumberger	3417105	
Jars	Smith	DAH02935	9.48					6.75" Flex Monel	Marlex	30-0316	
HWDP	AKITA							6.75" Flex Monel	Marlex	30-0317	
5" DP to surf.								6.75" Flex Pony Monel	Marlex	2676	
								6.75" Flex Pony Monel	Marlex	9147	
								6.75" X/O	Schlumberger	1217136	
								6.75" X/O	Schlumberger	2217154	
								6.75" X/O	Schlumberger	1215902	
								6.75" X/O	Schlumberger	2217106	
									Schlumberger	11622R	
									Schlumberger	5905H90	
									Schlumberger	N5662R	
									Schlumberger	1405H90	
									National		
									National		
Total Length		42.11		Total Length							
Personnel											
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man: Mike Bryson/Al Curtis/John Spe		Phone No: 1-403-699-2886					
Alternate:		Alternate:									
Night DD:	Clint Chase	Night MWD:	Jong Wan Yoo								
Alternate:		Alternate:									
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature							



Drilling and Measurements

Daily Service Report

February 8, 2004

Job Information										Day 30					
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400							
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921							
Drilling Record		Time Record				Cost Estimate									
Bit Number	8	Hrs	From	To	Code	Description	Description	Unit	Price	Cost					
Bit Size	222 mm	0.25	0.00	0.15	21	Safety meeting	DD Supervision		\$775						
Bit Type	R31V	7.00	0.15	7.15	2	Drill From 2800m to 2842m	MWD Supervision		\$575						
Jets (mm)	10 10 10	0.50	7.15	7.45	10	Surveys	PowerDrive Flat Rate		\$28,000						
TFA (mm2)	236	0.25	7.45	8.00	7	Rig Service	Flat Rate Operating	1 @	\$8,700	\$8,700.00					
Depth In	2779.50	0.25	8.00	8.15	21	Safety meeting	PowerDrive Non Productive Rate		\$17,000						
Depth Out	2912.00	6.75	8.15	15.00	2	Drill From 2842m to 2883m	Gamma Ray Operating	1 @	\$950	\$950.00					
Meters	132.50	0.25	15.00	15.15	7	Rig Service	Gamma Ray Standby		\$0						
Hours	22.50	3.25	15.15	18.30	2	Drill From 2883m to 2899m	E-Pulse Operating								
ROP (m/hr)	5.89	1.50	18.30	20.00	10	Surveys	E-Pulse Standby								
RPM	25/110	0.25	20.00	20.15	21	Safety meeting	Silmpulse MWD Monitoring		\$3,500						
WOB	20	1.00	20.15	21.15	2	Drill from 2899m to 2912m	Silmpulse Standby		n/c						
PP On	14000	0.25	21.15	21.30	10	Dev survey	APWD Operating								
PP Off	11800	0.25	21.30	21.45	7	Rig Service	XP/AD motor premium	22.50 @	\$30	\$675.00					
String Weight	112.0	2.25	21.45	0.00	5	Cond. Mud circ. Bottoms up	Trucking Ticket No.		\$4,080						
PU Weight	145.0														
SO weight	90.0														
Pump Data						Tool Failure Credit									
Manufacturer	National					Motor Reline correction									
Model	10-P-130					\$12									
Tri/Duplex	Triplex					Thread Inspection									
Liner Size	152					\$31									
Stroke Length	254					Motor Thread Inspection									
M3/Stroke	0.0139					\$300									
Stroke Rate	108					Motor Reline * \$US									
Volume	1.5012					\$12,620									
		Total Hrs 24.00				Substance									
						\$75									
						Kilometers Today									
						200 @ \$0.85 \$170.00									
						Vehicle Plate #s									
						VTE 581 YRA 333									
						Daily Total \$10,495.00									
						Accumulated \$292,999.00									
Mud Record		Downhole Motor Record				Jars									
Type	Invert	Run	Vendor	Serial Number	Daily			Run			Well			Hours	Serial Number
Weight	1075				Circ	Drill	Total	Circ	Drill	Total	Circ	Drill	Total	27.50	DAH02935
Viscosity	52														
Water Loss		1	SLB	675A 24-3219	4.50	18.00	22.50	5.00	22.50	27.50	5.00	22.50	27.50		
pH															
Sand															
Temperature	96														
BHA #8		BHA #				Wellsite Inventory									
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number					
8 3/4" F31VPS	Smith	MR1102	0.25					8" PDM	National	3111-80016					
6 3/4" 7/8 5.0 XP set @ 1.83	Schlumberger	675A-24-3219	7.83					7.75" PDM	National	775-77197-24					
6 3/4" Ponel Monel	Marlex	C650102676	2.93					7.75" PDM	National	775-77198-24					
6 3/4" NM Float Sub	Schlumberger	2317102	0.79					8" Bell Sub	Schlumberger	1220360					
6 3/4" NM UBHO Sub	Schlumberger	3417105	0.71					8" Bell Sub	Schlumberger	3217100					
6 3/4" Flex Monel	Marlex	C6646300316	9.45					6.75" NM Float Sub	Schlumberger	2317102					
6 3/4" Flex Monel	Marlex	C6646300317	9.45					6.75" NM Float Sub	Schlumberger	2317106					
X/O	AKITA		1.22					6.75" NM UBHO	Schlumberger	2417113					
HWDP	AKITA		112.41					6.75" NM UBHO	Schlumberger	3417105					
Jars	Smith	DAH02935	9.48					6.75" Flex Monel	Marlex	30-0316					
HWDP	AKITA		138.57					6.75" Flex Monel	Marlex	30-0317					
5" DP to surf.								6.75" Flex Pony Monel	Marlex	2676					
								6.75" Flex Pony Monel	Marlex	9147					
								6.75" X/O	Schlumberger	1217136					
								6.75" X/O	Schlumberger	2217154					
								6.75" X/O	Schlumberger	1215902					
								6.75" X/O	Schlumberger	2217106					
									Schlumberger	11622R					
									Schlumberger	5905H90					
									Schlumberger	N5662R					
									Schlumberger	1405H90					
									National						
									National						
Total Length 293.09				Total Length											
Personnel															
Lead DD:	Arlen Yakimchuk			Lead MWD:	Paul Hardwick			Co.Man:	Mike Bryson/AI Curtis/John Spe			Phone No:	1-403-699-2886		
Alternate:				Alternate:											
Night DD:	Clint Chase			Night MWD:	Jong Wan Yoo										
Alternate:				Alternate:											
Field Phone No: 1-403-699-2887 / 860-4437								Company Representatives Signature							



Daily Service Report

February 9, 2004

CES:12.8



February 10, 2004

CFS 13.8



February 11, 2004

CGT-D/M-6.5-FRM-003 Rev3

Schlumberger

Drilling and Measurements

Daily Service Report

February 12, 2004

Job Information										Day 34	
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400			
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921			
Drilling Record		Time Record				Cost Estimate					
Bit Number		Hrs	From	To	Code	Description	Description	Unit	Price	Cost	
Bit Size		24.00	0.00	0.00		Standby	DD Supervision	2 @	\$775	\$1,550.00	
Bit Type							MWD Supervision	2 @	\$575	\$1,150.00	
Jets (mm)							PowerDrive Flat Rate		\$28,000		
TFA (mm2)							Flat Rate Operating		\$8,700		
Depth In							PowerDrive Non Productive Rate		\$17,000		
Depth Out							Gamma Ray Operating		\$950		
Meters							Gamma Ray Standby		\$0		
Hours							E-Pulse Operating				
ROP (m/hr)							E-Pulse Standby				
RPM							Slimpulse MWD Monitoring		\$3,500		
WOB							Slimpulse Standby		n/c		
PP On							APWD Operating				
PP Off							XP/AD motor premium	0.00 @	\$30	\$0.00	
String Weight							Trucking Ticket No.		\$4,080		
PU Weight											
SO weight											
Pump Data						Tool Failure Credit					
Manufacturer	National	National					Motor Reline correction				
Model	10-P-130	10-P-130					Thread Inspection		\$31		
Tri/Duplex	Triplex	Triplex					Motor Thread Inspection		\$300		
Liner Size	152	152					Motor Reline * \$US		\$12,620		
Stroke Length	254	254					Substance		\$75		
M3/Stroke	0.0139	0.0139					Kilometers Today	200 @	\$0.85	\$170.00	
Stroke Rate	108										
Volume	1.5012	0					Vehicle Plate #s				
Mud Record		1.50 m3/min				VTE 581 YRA 333					
						YVJ 580					
						Daily Total					
						Accumulated					
						\$2,870.00					
						\$323,739.00					
Type		Downhole Motor Record				Jars					
Weight		Run	Vendor	Serial Number		Daily	Run	Well	Hours	Serial Number	
Viscosity						Circ	Drill	Total	Circ	Drill	Total
Water Loss											
pH											
Sand											
Temperature											
BHA # 8		BHA #				Wellsite Inventory					
Description	Vendor	Serial Number	Length		Description	Vend	SN	Length	Description	Vendor	Serial Number
									Moror 7/8 XP	SLB	675a-24-3219
									Motor 7/8 XP	SLB	675a-24011
Total Length		Total Length									
Personnel											
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man:	Mike Bryson/Al Curtis/John Spe	Phone No:	1-403-699-2886				
Alternate:		Alternate:									
Night DD:	Clint Chase	Night MWD:	Jong Wan Yoo								
Alternate:		Alternate:									
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature							



February 13, 2004

CGT-DIM-6.5-FRM-003 Rev3



Daily Service Report

February 14, 2004

Job Information										Day 36						
Company: Chevron Canada Resources					Location: 3K-29					AFE Number: RWWNC-R3004-400						
Well Name: Chevron et al Liard 3K-29					Rig: Akita #48					Job Number: 40009921						
Drilling Record			Time Record				Cost Estimate									
Bit Number	9		Hrs	From	To	Code	Description	Description	Unit	Price	Cost					
Bit Size	156 mm		0.75	0.00	0.45	24	Strap pipe and blow kelly	DD Supervision		\$775						
Bit Type	DSX-146		2.25	0.45	3.00	6	Pick up Dp	MWD Supervision		\$575						
Jets (mm)	10 10 10 12 12 12		0.50	3.00	3.30	5	Fill pipe	PowerDrive Flat Rate		\$28,000						
TFA (mm2)	575	391	1.25	3.30	4.45	6	Pipe up Dp	Flat Rate Operating	1 @	\$8,700	\$8,700.00					
Depth In	2912.00		0.25	4.45	5.00	21	Safety meeting	PowerDrive Non Productive Rate		\$17,000						
Depth Out	2919.00		0.75	5.00	5.45	9	slip/cut	Gamma Ray Operating		\$950						
Meters	7.00		0.25	5.45	6.00	7	Rig service	Gamma Ray Standby		\$0						
Hours	1.00		1.00	6.00	7.00	24	Strap pipe	E-Pulse Operating								
ROP (m/hr)	7.00		8.50	7.00	15.30	6	pick up Dp	E-Pulse Standby								
RPM	140/15		1.75	15.30	17.15	22	Drill cement	Slimpulse MWD Monitoring		\$3,500						
WOB	5		0.25	17.15	17.30	21	Hold h2s Drill	Slimpulse Standby		n/c						
PP On	8500		0.25	17.30	17.45	7	Rig service	APWD Operating								
PP Off	7200		2.25	17.45	20.00	22	Drill cement	XP/AD motor premium	6.75 @	\$30	\$202.50					
String Weight	69.0		0.25	20.00	20.15	23	B.O.P drill	Trucking Ticket No.		\$4,080						
PU Weight	79.0		0.25	20.15	20.30	22	Drill cement									
SO weight	68.0		0.50	20.30	21.00	2	Drill 156mm hole from 2912m to 2915m									
Pump Data			1.50	21.00	22.30	5	Circ bottoms up	Tool Failure Credit		-\$350						
Manufacturer	National	National	0.75	22.30	23.15	15	leak off test	Motor Reline correction								
Model	10-P-130	10-P130	0.25	23.15	23.30	7	Rig service	Thread Inspection		\$31						
Tri/Duplex	Triplex	Triplex	0.50	23.30	0.00	2	Drill from 2915m to 2919m	Motor Thread Inspection		\$300						
Liner Size	152	152						Motor Reline * \$US		\$12,620						
Stroke Length	254	254						Subsistence		\$75						
M3/Stroke	0.0139	0.0139	Total Hrs			24.00		Kilometers Today	200 @	\$0.85	\$170.00					
Stroke Rate	60		Comments					Vehicle Plate #'s								
Volume	0.834	0						VTE 581	YRA 333	Daily Total	\$9,072.50					
Mud Record	0.00 m3/min							YVW 580		Accumulated	\$341,681.50					
Type			Downhole Motor Record						Jars							
Weight			Run	Vendor	Serial Number	Daily			Run			Well			Hours	Serial Number
Viscosity						Circ	Drill	Total	Circ	Drill	Total	Circ	Drill	Total		
Water Loss			1	Wenzel	4754745024	5.75	1.00	6.75	5.75	1.00	6.75	5.75	1.00	6.75		
pH																
Sand																
Temperature																
BHA # 9					BHA #					Wellsite Inventory						
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number						
5.6mm DSX-146 HGJW 3x10 3x	Hycalog	106706	0.20					Morar 7/8 XP	SLB	675a-24-3219						
121mm 7/8 5.0 w/Stabilizer	Wenzel	475 4745024	7.82					Motor 7/8 XP	SLB	675a-24011						
115mm Pony Flex Monel	Marlex	46401066														

Job Information										Day 37	
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400			
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921			
Drilling Record		Time Record				Cost Estimate					
Bit Number	9	Hrs	From	To	Code	Description	Description	Unit	Price	Cost	
Bit Size	156 mm	6.75	0.00	6.45	2	Drill From 2919m to 2960m	DD Supervision		\$775		
Bit Type	DSX-146	0.25	6.45	7.00	7	Rig Service	MWD Supervision		\$575		
Jets (mm)	10 10 10 12 12 12	1.00	7.00	8.00	10	Surveys	PowerDrive Flat Rate		\$28,000		
TFA (mm2)	575 340	2.50	8.00	10.30	2	Drill From 2960m to 2978m	Flat Rate Operating	1 @	\$8,700	\$8,700.00	
Depth In	2912.00	0.25	10.30	10.45	7	Rig Service	PowerDrive Non Productive Rate		\$17,000		
Depth Out	3037.00	7.25	10.45	18.00	2	Drill From 2976m to 3034m	Gamma Ray Operating	1 @	\$950	\$950.00	
Meters	125.00	2.00	18.00	20.00	10	Surveys	Gamma Ray Standby		\$0		
Hours	16.75	0.25	20.00	20.15	2	Drill from 3034m to 3037m	E-Pulse Operating				
ROP (m/hr)	7.46	0.25	20.15	20.30	10	Surveys	E-Pulse Standby				
RPM	140/15	2.75	20.30	23.15	22	work stuck pipe	Silmpulse MWD Monitoring		\$3,500		
WOB	6	0.50	23.15	23.45	3	Wash back to 2958m	Silmpulse Standby		n/c		
PP On	9500	0.25	23.45	0.00	7	Rig Service	APWD Operating				
PP Off	7500						XP/AD motor premium	21.25 @	\$30	\$637.50	
String Weight	70.0						Trucking Ticket No.		\$4,080		
PU Weight	90.0										
SO weight	55.0										
Pump Data						Tool Failure Credit					-\$350
Manufacturer	National	National					Motor Reline correction				
Model	10-P-130	10-P130					Thread Inspection		\$31		
Tri/Duplex	Triplex	Triplex					Motor Thread Inspection		\$300		
Liner Size	152	152					Motor Reline * \$US		\$12,620		
Stroke Length	254	254					Substance		\$75		
M3/Stroke	0.0139	0.0139					Kilometers Today	200 @	\$0.85	\$170.00	
Stroke Rate	60						Vehicle Plate #'s				
Volume	0.834	0					VTE 581	YRA 333		Daily Total	
Mud Record		0.83 m3/min				Comments					
Type	polymer	Downhole Motor Record				Jars					
Weight	1015	Run	Vendor	Serial Number		Daily	Run	Well		Hours	Serial Number
Viscosity	35					Circ	Drill	Total	Circ	Drill	Total
Water Loss	20	1	Wenzel	475475024		4.50	16.75	21.25	10.25	17.75	28.00
pH	11.5								10.25	17.75	28.00
Sand											
Temperature	124										
SHA # 9				SHA #				Wellsite Inventory			
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number	
5.6mm DSX-146 HGJW 3x10 3x	Hycalog	106706	0.20					Moror 7/8 XP	SLB	675a-24-3219	
121mm 7/8 5.0 w/Stabilizer	Wenzel	475 4745024	7.82					Motor 7/8 XP	SLB	675a-24011	
115mm Pony Flex Monel	Marlex	4640106634	2.81								
120mm UBHO Sub	Schlumberger	2312110	0.89								
121mm Flex Monel	Marlex	463630 0022	9.34								
121mm Flex Monel	Marlex	CHBOO2	9.35								
121mm Flex Monel	Marlex	463430 7061	9.28								
Jts 88.9mm Hevi Waite Drill Pip			27.91								
Drill pipe to surface											
Total Length				67.6	Total Length						
Personnel											
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man: Mike Bryson/Al Curtis/John Spe		Phone No: 1-403-699-2886					
Alternate:		Alternate:									
Night DD:	Clint Chase	Night MWD:	Jong Wan Yoo								
Alternate:		Alternate:									
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature							

Schlumberger

Drilling and Measurements

Daily Service Report

February 16, 2004

Job Information										Day 38		
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400				
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921				
Drilling Record		Time Record				Cost Estimate						
Bit Number	9	Hrs	From	To	Code	Description	Description	Unit	Price	Cost		
Bit Size	156 mm	0.50	0:00	0:30	3	Wash back to 2918m	DD Supervision		\$775			
Bit Type	DSX-146	0.25	0:30	0:45	7	Rig service	MWD Supervision		\$575			
Jets (mm)	10 10 10 12 12 12	7.25	0:45	8:00	5	Circ and cond. Mud	PowerDrive Flat Rate		\$28,000			
TFA (mm2)	575 381	5.50	8:00	13:30	5	Circ and cond. Mud	Flat Rate Operating	1 @	\$8,700	\$8,700.00		
Depth In	2912.00	0.75	13:30	14:15	3	Wash in to 2975m	PowerDrive Non Productive Rate		\$17,000			
Depth Out	3093.00	0.25	14:15	14:30	7	Rig service	Gamma Ray Operating		\$950			
Meters	181.00	0.75	14:30	15:15	3	Wash in to 3037m	Gamma Ray Standby		\$0			
Hours	26.25	3.75	15:15	19:00	2	Drill From 3037m to 3065m	E-Pulse Operating					
ROP (m/hr)	6.90	1.00	19:00	20:00	10	Surveys	E-Pulse Standby					
RPM	140/15	0.25	20:00	20:15	21	Safety meeting	Slimpulse MWD Monitoring		\$3,500			
WOB	6	3.00	20:15	23:15	2	drill from 3065m to 3093m	Slimpulse Standby		n/c			
PP On	12800	0.25	23:15	23:30	7	Rig service	APWD Operating					
PP Off	11200	0.50	23:30	0:00	10	Surveys	XP/AD motor premium	21.00 @	\$30	\$630.00		
String Weight	70.0						Trucking Ticket No.		\$4,080			
PU Weight	90.0											
SO weight	52.0											
Pump Data						Tool Failure Credit						
Manufacturer	National	National					Motor Reline correction			-\$350		
Model	10-P-130	10-P130					Thread Inspection		\$31			
Tri/Duplex	Triplex	Triplex					Motor Thread Inspection		\$300			
Liner Size	152	152					Motor Reline * \$US		\$12,620			
Stroke Length	254	254					Substance		\$75			
M3/Stroke	0.0139	0.0139					Kilometers Today	200 @	\$0.85	\$170.00		
Stroke Rate	60						Vehicle Plate #'s					
Volume	0.834	0					VTE 581	YRA 333		Daily Total	\$9,500.00	
Mud Record	0.83 m3/min						YWJ 580			Accumulated	\$361,639.00	
Type	polymer	Downhole Motor Record								Jars		
Weight	1020	Run	Vendor	Serial Number		Daily	Run	Well	Hours	Serial Number		
Viscosity	40					Circ	Drill	Total	Circ	Drill	Total	
Water Loss	12	1	Wenzel	475475024		14.25	6.75	21.00	24.50	24.50	49.00	
pH	11											
Sand												
Temperature	124											
BHA # 9		BHA #				Wellsite Inventory						
Description	Vendor	Serial Number	Length		Description	Vendor	SN	Length	Description	Vendor	Serial Number	
5.6mm DSX-146 HGIW 3x10 3x	Hycalog	106706	0.20						Moror 7/8 XP	SLB	675a-24-3219	
121mm 7/8 5.0 w/Stabilizer	Wenzel	475 4745024	7.82						Motor 7/8 XP	SLB	675a-24011	
115mm Pony Flex Monel	Marlex	4640106634	2.81									
120mm UBHO Sub	Schlumberger	2312110	0.89									
121mm Flex Monel	Marlex	463630 0022	9.34									
121mm Flex Monel	Marlex	CHBOO2	9.35									
121mm Flex Monel	Marlex	463430 7061	9.28									
Jts 88.9mm Hevi Waite Drill Pip			27.91									
Drill pipe to surface												
Total Length				67.6	Total Length							
Personnel												
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man:	Mike Bryson/AI Curtis/John Spe	Phone No:	1-403-699-2886					
Alternate:		Alternate:										
Night DD:	Clint Chase	Night MWD:	Jong Wan Yoo									
Alternate:		Alternate:										
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature								



Daily Service Report

Drilling and Measurements

February 17, 2004

Job Information										Day 39						
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWNMC-R3004-400								
Well Name: Chevron et al Liard 3K-29				Rig: Akta #48				Job Number: 40009921								
Drilling Record			Time Record				Cost Estimate									
Bit Number	9		Hrs	From	To	Code	Description	Description	Unit	Price	Cost					
Bit Size	156 mm		6.50	0:00	6:30	2	Drill from 3093m to 3141m	DD Supervision		\$775						
Bit Type	DSX-146		0.25	6:30	6:45	7	Rig service	MWD Supervision		\$575						
Jets (mm)	10 10 10 12 12 12		1.25	6:45	8:00	10	Survey	PowerDrive Flat Rate		\$28,000						
TFA (mm2)	575	341	0.25	8:00	8:15	21	Safety meeting	Flat Rate Operating	1 @	\$8,700	\$8,700.00					
Depth In	2912.00		5.75	8:15	14:00	2	Drill from 3141m to 3177m	PowerDrive Non Productive Rate		\$17,000						
Depth Out	3226.00		0.25	14:00	14:15	7	Rig service	Gamma Ray Operating		\$950						
Meters	314.00		1.00	14:15	15:15	10	Dev survey	Gamma Ray Standby		\$0						
Hours	46.00		0.75	15:15	16:00	2	Drill from 3177m to 3184m	E-Pulse Operating								
ROP (m/hr)	6.83		0.25	16:00	16:15	21	Safety meeting	E-Pulse Standby								
RPM	140/15		6.75	16:15	23:00	2	Drill from 3185m to 3226m	Slimpulse MWD Monitoring		\$3,500						
WOB	6		0.25	23:00	23:15	21	Safety meeting	Slimpulse Standby		n/c						
PP On	12800		0.50	23:15	23:45	10	Dev survey	APWD Operating								
PP Off	11400		0.25	23:45	0:00	7	Rig service	XPIAD motor premium	22.50 @	\$30	\$675.00					
String Weight	70.0							Trucking Ticket No.		\$4,080						
PU Weight	95.0															
SO weight	50.0															
Pump Data							Tool Failure Credit				-\$350					
Manufacturer	National	National					Motor Reline correction									
Model	10-P-130	10-P130					Thread Inspection				\$31					
Tri/Duplex	Triplex	Triplex					Motor Thread Inspection				\$300					
Liner Size	152	152					Motor Reline * \$US				\$12,620					
Stroke Length	254	254					Subsistence				\$75					
M3/Stroke	0.0139	0.0139	Total Hrs 24.00				Kilometers Today			200 @	\$0.85	\$170.00				
Stroke Rate	60						Vehicle Plate #'s									
Volume	0.834	0					VTE 581			YRA 333	Daily Total	\$9,545.00				
Mud Record			0.83 m3/min				YWJ 580				Accumulated	\$371,184.00				
Type	polymer	Downhole Motor Record										Jars				
Weight	1040	Run	Vendor	Serial Number	Daily			Run			Well			Hours	Serial Number	
Viscosity	40				Circ	Drill	Total	Circ	Drill	Total	Circ	Drill	Total	71.50		
Water Loss	13.8	1	Wenzel	475475024	2.75	19.75	22.50	27.25	44.25	71.50	27.25	44.25	71.50			
pH	10															
Sand																
Temperature	124															
BHA # 9				BHA #				Wellsite Inventory								
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number						
5.6mm DSX-146 HGJW 3x10 3x	Hycalog	106706	0.20													
121mm 7/8 5.0 w/Stabilizer	Wenzel	475 4745024	7.82													
115mm Pony Flex Monel	Marlex	4640106634	2.81													
120mm UBHO Sub	Schlumberger	2312110	0.89													
121mm Flex Monel	Marlex	463630 0022	9.34													
121mm Flex Monel	Marlex	CHBOO2	9.35													
121mm Flex Monel	Marlex	463430 7061	9.28													
Jts 88.9mm Hevi Waite Drill Pip			27.91													
Drill pipe to surface																
Total Length				67.6	Total Length											
Personnel																
Lead DD:	Arlen Yakimchuk			Lead MWD:	Paul Hardwick			Co.Man:	Mike Bryson/Al Curtis/John Spe			Phone No:	1-403-699-2886			
Alternate:				Alternate:												
Night DD:	Clint Chase			Night MWD:	Jong Wan Yoo											
Alternate:				Alternate:												
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature												



Drilling and Measurements

Daily Service Report

February 18, 2004

Job Information										Day 40	
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400			
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921			
Drilling Record		Time Record				Cost Estimate					
Bit Number	9	Hrs	From	To	Code	Description	Description	Unit	Price	Cost	
Bit Size	156 mm	0.25	0.00	0.15	21	Safety meeting	DD Supervision		\$775		
Bit Type	DSX-146	0.25	0.15	0.30	7	Rig service	MWD Supervision		\$575		
Jets (mm)	10 10 10 12 12 12	6.50	0.30	7.00	2	Drill From 3226m to 3275m	PowerDrive Flat Rate		\$28,000		
TFA (mm2)	575 373	1.00	7.00	8.00	10	Surveys	Flat Rate Operating	1 @	\$8,700	\$8,700.00	
Depth In	2912.00	0.25	8.00	8.15	21	Safety meeting	PowerDrive Non Productive Rate		\$17,000		
Depth Out	3251.00	4.50	8.15	12.45	2	Drill From 3275m to 3322m	Gamma Ray Operating		\$950		
Meters	339.00	0.75	12.45	13.30	10	Surveys	Gamma Ray Standby		\$0		
Hours	59.50	0.25	13.30	13.45	7	Rig service	E-Pulse Operating				
ROP (m/hr)	5.70	0.75	13.45	14.30	5	Circ	E-Pulse Standby				
RPM	140/15	3.00	14.30	17.30	6	Wiper Trip	Slimpulse MWD Monitoring		\$3,500		
WOB	6	0.25	17.30	17.45	21	Safety meeting	Slimpulse Standby		n/c		
PP On	13500	2.25	17.45	20.00	6	Wiper Trip	APWD Operating				
PP Off	12000	0.25	20.00	20.15	21	Safety meeting	XPIAD motor premium	17.00 @	\$30	\$510.00	
String Weight	70.0	2.50	20.15	22.45	2	Drill from 3322m to 3251m	Trucking Ticket No.		\$4,080		
PU Weight	95.0	0.25	22.45	23.00	7	Rig service					
SO weight	50.0	1.00	23.00	0.00	10	Dev survey					
Pump Data							Tool Failure Credit				-\$350
Manufacturer	National	National					Motor Reline correction				
Model	10-P-130	10-P130					Thread Inspection		\$31		
Tri/Duplex	Triplex	Triplex					Motor Thread Inspection		\$300		
Liner Size	152	152					Motor Reline * \$US		\$12,620		
Stroke Length	254	254					Subsistence		\$75		
M3/Stroke	0.0139	0.0139	Total Hrs	24.00			Kilometers Today	200 @	\$0.85	\$170.00	
Stroke Rate	60		Comments				Vehicle Plate #s				
Volume	0.834	0					VTE 581	YRA 333	Daily Total	\$9,380.00	
Mud Record	0.83 m3/min						YWJ 580		Accumulated	\$380,564.00	
Type	polymer	Downhole Motor Record				Jars					
Weight	1040	Run	Vendor	Serial Number	Daily	Run	Well	Hours	Serial Number		
Viscosity	40				Circ	Drill	Total	Circ	Drill	Total	
Water Loss	10	1	Wenzel	475475024	3.50	13.50	17.00	30.75	57.75	88.50	
pH	9							30.75	57.75	88.50	
Sand											
Temperature	124										
BHA # 9				BHA #				Wellsite Inventory			
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number	
5.6mm DSX-146 HGJW 3x10 3x	Hycalog	106706	0.20					Motor 7/8 XP	SLB	675a-24-3219	
121mm 7/8 5.0 w/Stabilizer	Wenzel	475 4745024	7.82					Motor 7/8 XP	SLB	675a-24011	
115mm Pony Flex Monel	Marlex	4640106634	2.81								
120mm UBHO Sub	Schlumberger	2312110	0.89								
121mm Flex Monel	Marlex	463630 0022	9.34								
121mm Flex Monel	Marlex	CHBOO2	9.35								
121mm Flex Monel	Marlex	463430 7061	9.28								
Jts 88.9mm Hevi Waite Drill Pip			27.91								
Drill pipe to surface											
Total Length 67.6				Total Length							
Personnel											
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man:	Mike Bryson/AI Curtis/John Spe	Phone No:	1-403-699-2886				
Alternate:		Alternate:									
Night DD:	Clint Chase	Night MWD:	Jong Wan Yoo								
Alternate:		Alternate:									
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature							



Drilling and Measurements

Daily Service Report

February 19, 2004

Job Information										Day 41					
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400							
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921							
Drilling Record		Time Record				Cost Estimate									
Bit Number	9	Hrs	From	To	Code	Description	Description	Unit	Price	Cost					
Bit Size	156 mm	0.25	0.00	0.15	0.25	Rig service	DD Supervision		\$775						
Bit Type	DSX-146	6.25	0.15	6.30	2	Drill from 3251m to 3395m	MWD Supervision		\$575						
Jets (mm)	10 10 10 12 12 12	1.50	6.30	8.00	10	Surveys	PowerDrive Flat Rate		\$28,000						
TFA (mm2)	575 341	0.25	8.00	8.15	21	Safety Meeting	Flat Rate Operating	1 @	\$8,700	\$8,700.00					
Depth In	2912.00	10.50	8.15	18.45	2	Drill from 3395m to 3484m	PowerDrive Non Productive Rate		\$17,000						
Depth Out	3515.00	1.00	18.45	19.45	10	Surveys	Gamma Ray Operating		\$950						
Meters	603.00	0.25	19.45	20.00	7	Rig service	Gamma Ray Standby		\$0						
Hours	79.00	0.25	20.00	20.15	21	Safety Meeting	E-Pulse Operating								
ROP (m/hr)	7.63	2.75	20.15	23.00	2	Drill from 3484m 3515m	E-Pulse Standby								
RPM	140/15	0.25	23.00	23.15	7	Rig service	Stimpulse MWD Monitoring		\$3,500						
WOB	6	0.75	23.15	0.00	10	Dev survey	Stimpulse Standby		n/c						
PP On	15500						APWD Operating								
PP Off	13500						XP/AD motor premium	22.75 @	\$30	\$682.50					
String Weight	70.0						Trucking Ticket No.								
PU Weight	82.0														
SO weight	58.0														
Pump Data						Tool Failure Credit					-\$350				
Manufacturer	National	National					Motor Reline correction								
Model	10-P-130	10-P130					Thread Inspection		\$31						
Tri/Duplex	Triplex	Triplex					Motor Thread Inspection		\$300						
Liner Size	152	152					Motor Reline * \$US								
Stroke Length	254	254					Subsistence		\$75						
M3/Stroke	0.0139	0.0139					Kilometers Today	200 @	\$0.85	\$170.00					
Stroke Rate	60						Vehicle Plate #'s								
Volume	0.834	0					VTE 581	YRA 333	Daily Total	\$9,552.50					
Mud Record	0.83 m3/min						YVJ 580		Accumulated	\$390,116.50					
Type	polymer	Downhole Motor Record				Jars									
Weight	1060	Run	Vendor	Serial Number	Daily			Run			Well				
Viscosity	44				Circ	Drill	Total	Circ	Drill	Total	Circ	Drill	Total	Hours	Serial Number
Water Loss	6.5	1	Wenzel	475475024	3.25	19.50	22.75	34.00	77.25	111.25	34.00	77.25	111.25		
pH	9														
Sand															
Temperature	124														
BHA # 9		BHA #				Wellsite Inventory									
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number					
5.6mm DSX-146 HGJW 3x10 3x	Hycalog	106706	0.20												
121mm 7/8 5.0 w/Stabilizer	Wenzel	475 4745024	7.82												
115mm Pony Flex Monel	Marlex	4640106634	2.81												
120mm UBHO Sub	Schlumberger	2312110	0.89												
121mm Flex Monel	Marlex	463630 0022	9.34												
121mm Flex Monel	Marlex	CHBOC2	9.35												
121mm Flex Monel	Marlex	463430 7081	9.28												
Jts 88.9mm Hevi Waite Drill Pip			27.91												
Drill pipe to surface															
Total Length				67.6	Total Length										
Personnel															
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man: Mike Bryson/Al Curtis/John Sp				Phone No: 1-403-699-2886							
Alternate:		Alternate:													
Night DD:	Clint Chase	Night MWD:	Jong Wan Yoo												
Alternate:		Alternate:													
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature											



February 20, 2004

CFS 13.8



Drilling and Measurements

Daily Service Report

February 21, 2004

Job Information										Day 43						
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400								
Well Name: Chevron et al Lard 3K-29				Rig: Akita #48				Job Number: 40009921								
Drilling Record		Time Record				Cost Estimate										
Bit Number	9	Hrs	From	To	Code	Description	Description	Unit	Price	Cost						
Bit Size	156 mm	3.50	0.00	3:30	2	Drill From 3670m to 3700m	DD Supervision		\$775							
Bit Type	DSX-146	0.50	3:30	4:00	10	Surveys	MWD Supervision		\$575							
Jets (mm)	10 10 10 12 12 12	2.50	4:00	6:30	5	Circ	PowerDrive Flat Rate		\$28,000							
TFA (mm2)	575 344	0.25	6:30	6:45	7	Rig Service	Flat Rate Operating	1 @	\$8,700	\$8,700.00						
Depth In	2912.00	1.25	6:45	8:00	3	Pump Out & Back Ream	PowerDrive Non Productive Rate		\$17,000							
Depth Out	3700.00	0.25	8:00	8:15	21	Safety Meeting	Gamma Ray Operating		\$950							
Meters	788.00	6.75	8:15	15:00	3	Wash Back to Bottom	Gamma Ray Standby		\$0							
Hours	98.75	4.75	15:00	19:45	5	Cond mud	E-Pulse Operating									
ROP (m/hr)	7.98	0.25	19:45	20:00	7	Rig Service	E-Pulse Standby									
RPM	140/15	0.25	20:00	20:15	21	Safety Meeting	Slimpulse MWD Monitoring		\$3,500							
WOB	6	0.25	20:15	20:30	5	Cond mud	Slimpulse Standby		n/c							
PP On	15500	3.25	20:30	23:45	6	P.O.O.H	APWD Operating									
PP Off	13500	0.25	23:45	0:00	7	Rig Service	XP/AD motor premium	19.50 @	\$30	\$585.00						
String Weight	70.0						Trucking Ticket No.									
PU Weight	80.0															
SO weight	60.0															
Pump Data						Tool Failure Credit										
Manufacturer	National	National					Motor Reline correction			-\$350						
Model	10-P-130	10-P130					Thread Inspection		\$31							
Tri/Duplex	Triplex	Triplex					Motor Thread Inspection		\$300							
Liner Size	152	152					Motor Reline * \$US									
Stroke Length	254	254					Subsistence		\$75							
M3/Stroke	0.0139	0.0139					Kilometers Today	200 @	\$0.85	\$170.00						
Stroke Rate	60						Vehicle Plate #'s									
Volume	0.834	0					VTE 581	YRA 333	Daily Total	\$9,455.00						
Mud Record	0.83 m3/min						YWJ 580		Acumulated	\$409,124.00						
Type	polymer	Downhole Motor Record				Jars										
Weight	1060	Run	Vendor	Serial Number	Daily			Run			Well			Hours	Serial Number	
Viscosity	45				Circ	Drill	Total	Circ	Drill	Total	Circ	Drill	Total	153.50		
Water Loss	9	1	Wenzel	4754745024	16.00	3.50	19.50	53.00	100.50	153.50	53.00	100.50	153.50			
pH	10															
Sand																
Temperature	130															
BHA # 9		BHA #				Wellsite Inventory										
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number						
5.6mm DSX-146 HGJW 3x10 3x	Hycalog	106706	0.20													
121mm 7/8 5.0 w/Stabilizer	Wenzel	475 4745024	7.82													
115mm Pony Flex Monel	Marlex	4640106634	2.81													
120mm UBHO Sub	Schlumberger	2312110	0.89													
121mm Flex Monel	Marlex	463630 0022	9.34													
121mm Flex Monel	Marlex	CHBOO2	9.35													
121mm Flex Monel	Marlex	463430 7081	9.28													
Jts 88.9mm Hevi Waite Drill Pip			27.91													
Drill pipe to surface																
Total Length				67.6	Total Length											
Personnel																
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man: Mike Bryson/Al Curtis/John Spe				Phone No: 1-403-699-2886								
Alternate:		Alternate:														
Night DD:	Clint Chase	Night MWD:	Jong Wan Yoo													
Alternate:		Alternate:														
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature												

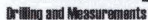
Schlumberger

Drilling and Measurements

Daily Service Report

February 22, 2004

Job Information										Day 44				
Company: Chevron Canada Resources				Location: 3K-29				AFE Number: RWWNC-R3004-400						
Well Name: Chevron et al Liard 3K-29				Rig: Akita #48				Job Number: 40009921						
Drilling Record			Time Record				Cost Estimate							
Bit Number	9		Hrs	From	To	Code	Description	Description	Unit	Price	Cost			
Bit Size	156 mm		2.00	0:00	2:00	6	P.O.O.H	DD Supervision		\$775				
Bit Type	DSX-146		0.25	2:00	2:15	21	Safety meeting	MWD Supervision		\$575				
Jets (mm)	10 10 10 12 12 12		1.00	2:15	3:15	9	slip/cut	PowerDrive Flat Rate		\$28,000				
TFA (mm2)	575	340	0.25	3:15	3:30	7	Rig service	Flat Rate Operating	1 @	\$8,700	\$8,700.00			
Depth in	2912.00		1.00	3:30	4:30	6	P.O.O.H	PowerDrive Non Productive Rate		\$17,000				
Depth Out	3700.00		1.50	4:30	6:00	20	Lay down dir.tools	Gamma Ray Operating		\$950				
Meters	788.00		0.25	6:00	6:15	21	Safety meeting	Gamma Ray Standby		\$0				
Hours	100.50		1.75	6:15	8:00	11	Pick up log tools	E-Pulse Operating						
ROP (m/hr)	7.84		0.25	8:00	8:15	21	Safety meeting	E-Pulse Standby						
RPM	140/15		5.75	8:15	14:00	6	RIH	Silmpulse MWD Monitoring		\$3,500				
WOB	6		0.25	14:00	14:15	21	Safety meeting	Silmpulse Standby		n/c				
PP On	15500		3.75	14:15	18:00		Released (Rig Out)	APWD Operating						
PP Off	13500						Travel To Ft. Nelson	XPIAD motor premium	0.00 @	\$30	\$0.00			
String Weight	70.0							Trucking Ticket No.						
PU Weight	80.0													
SO weight	60.0													
Pump Data							Tool Failure Credit							
Manufacturer	National	National						Motor Reline correction						
Model	10-P-130	10-P130						Thread Inspection	10 @	\$31	\$310.00			
Tri/Duplex	Triplex	Triplex						Motor Thread Inspection	1 @	\$300	\$300.00			
Liner Size	152	152						Motor Reline * \$US						
Stroke Length	254	254						Substance	4 @	\$75	\$300.00			
M3/Stroke	0.0139	0.0139						Kilometers Today	200 @	\$0.85	\$170.00			
Stroke Rate	60		Comments				Vehicle Plate #'s							
Volume	0.834	0					VTE 581		YRA 333	Daily Total	\$9,780.00			
Mud Record			0.83 m3/min				YWJ 580			Accumulated	\$418,904.00			
Type			polymer				Downhole Motor Record				Jars			
Weight	1060		Run	Vendor	Serial Number	Daily			Run			Well		
Viscosity	45					Circ	Drill	Total	Circ	Drill	Total	Circ	Drill	Total
Water Loss	9		1	Wenzel	4754745024	0.00	0.00	0.00	53.00	100.50	153.50	53.00	100.50	153.50
pH	10													
Sand														
Temperature	130													
BHA #9			BHA #			Wellsite Inventory								
Description	Vendor	Serial Number	Length	Description	Vend	SN	Length	Description	Vendor	Serial Number				
5.6mm DSX-146 HGJW 3x10 3x	Hycalog	106706	0.20					Moror 7/8 XP	SLB	675a-24-3219				
121mm 7/8 5.0 w/Stabilizer	Wenzel	475 4745024	7.82					Motor 7/8 XP	SLB	675a-24011				
115mm Pony Flex Monel	Marlex	4640106634	2.81											
120mm UBHO Sub	Schlumberger	2312110	0.89											
121mm Flex Monel	Marlex	463630 0022	9.34											
121mm Flex Monel	Marlex	CHBOO2	9.35											
121mm Flex Monel	Marlex	463430 7061	9.28											
Jts 88.9mm Hevi Waite Drill Pip			27.91											
Drill pipe to surface														
Total Length			67.6	Total Length										
Personnel														
Lead DD:	Arlen Yakimchuk	Lead MWD:	Paul Hardwick	Co.Man: Mike Bryson/Al Curtis/John Spe				Phone No: 1-403-699-2886						
Alternate:		Alternate:												
Night DD:	Clint Chase	Night MWD:	Jong Wan Yoo											
Alternate:		Alternate:												
Field Phone No: 1-403-699-2887 / 860-4437				Company Representatives Signature										



February 23, 2004

CFS 13.8