



Guidance Services

Job Number: 091117505257

Company: BOPCO, LP

Lease/Well: Poker Lake Unit, Well #199

Location: Eddy County, New Mexico

Rig Name: Patterson #488

RKB: 31'

G.L. or M.S.L.: GL

State/Country: New Mexico/USA

Declination: 7.66°

Grid: East To Grid

File name: F:\SURVEY\2009SU~1\BOPCOL~1\POKER199.SVY

Date/Time: 10-Mar-09 / 13:46

Curve Name: Surface - 12428' M.D. (gyroscopic)

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane .00
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

We hereby certify that our survey data from
 Surface MD to 12,428 MD is, to the best of
 our knowledge a true and accurate account of the
 well bore.
[Signature] 3/10/09
 Multi-Shot Date

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
100.00	.25	203.30	100.00	-.20	-.09	-.20	.22	203.30	.25
200.00	.25	66.93	200.00	-.32	.03	-.32	.32	174.90	.46
300.00	.25	143.56	300.00	-.41	.36	-.41	.54	138.51	.31
400.00	.25	187.18	400.00	-.80	.46	-.80	.92	149.97	.19
500.00	.25	199.81	500.00	-1.22	.36	-1.22	1.27	163.57	.05
600.00	.25	284.44	600.00	-1.37	.07	-1.37	1.37	176.89	.34
700.00	.25	215.07	700.00	-1.49	-.26	-1.49	1.52	189.96	.28
800.00	.25	326.69	799.99	-1.49	-.51	-1.49	1.57	198.80	.41
900.00	.25	30.32	899.99	-1.12	-.52	-1.12	1.23	204.79	.26

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
1000.00	.25	339.95	999.99	-.73	-.48	-.73	.87	213.56	.21
1100.00	.25	301.71	1099.99	-.41	-.74	-.41	.85	241.28	.16
1200.00	.25	292.34	1199.99	-.21	-1.13	-.21	1.15	259.51	.04
1300.00	.50	314.96	1299.99	.18	-1.64	.18	1.65	276.34	.29
1400.00	.50	326.59	1399.99	.85	-2.19	.85	2.35	291.33	.10
1500.00	.50	357.22	1499.98	1.65	-2.45	1.65	2.96	304.03	.26
1600.00	.25	8.84	1599.98	2.31	-2.44	2.31	3.36	313.41	.26
1700.00	.50	352.47	1699.98	2.95	-2.46	2.95	3.85	320.20	.27
1800.00	.25	311.10	1799.98	3.53	-2.68	3.53	4.43	322.76	.35
1900.00	.25	24.73	1899.97	3.87	-2.76	3.87	4.75	324.55	.30
2000.00	.50	37.35	1999.97	4.42	-2.40	4.42	5.03	331.48	.26
2100.00	.50	95.98	2099.97	4.72	-1.70	4.72	5.02	340.17	.49
2200.00	.50	97.61	2199.97	4.62	-.84	4.62	4.69	349.74	.01
2300.00	.50	68.31	2299.96	4.72	.00	4.72	4.72	.03	.25
2400.00	1.00	73.08	2399.95	5.13	1.24	5.13	5.28	13.61	.50
2500.00	1.00	85.86	2499.94	5.45	2.95	5.45	6.20	28.41	.22
2600.00	1.00	107.64	2599.92	5.25	4.65	5.25	7.01	41.54	.38
2700.00	1.00	117.42	2699.91	4.58	6.26	4.58	7.76	53.77	.17
2800.00	1.00	117.20	2799.89	3.78	7.81	3.78	8.67	64.15	.00
2900.00	.50	83.97	2899.88	3.43	9.02	3.43	9.65	69.18	.64
3000.00	.25	111.75	2999.88	3.39	9.65	3.39	10.23	70.63	.30
3100.00	.50	69.53	3099.88	3.47	10.26	3.47	10.83	71.34	.36
3200.00	.75	32.30	3199.87	4.17	11.02	4.17	11.79	69.27	.46
3300.00	1.50	31.07	3299.85	5.85	12.05	5.85	13.39	64.12	.75
3400.00	2.25	15.84	3399.80	8.86	13.26	8.86	15.95	56.26	.89
3500.00	2.25	16.62	3499.72	12.63	14.36	12.63	19.12	48.67	.03
3600.00	2.00	15.29	3599.65	16.19	15.38	16.19	22.33	43.53	.25
3700.00	1.75	10.07	3699.60	19.38	16.11	19.38	25.20	39.73	.30
3800.00	1.75	8.85	3799.55	22.39	16.61	22.39	27.88	36.57	.04
3900.00	1.50	8.63	3899.51	25.19	17.04	25.19	30.41	34.07	.25

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
4000.00	1.00	45.40	3999.49	27.10	17.86	27.10	32.45	33.38	.92
4100.00	.75	68.18	4099.48	27.95	19.09	27.95	33.85	34.32	.42
4200.00	.75	82.96	4199.47	28.28	20.34	28.28	34.83	35.73	.19
4300.00	.50	119.74	4299.47	28.14	21.37	28.14	35.34	37.21	.46
4400.00	.50	237.52	4399.46	27.69	21.38	27.69	34.98	37.68	.86
4500.00	.50	227.29	4499.46	27.16	20.69	27.16	34.14	37.30	.09
4600.00	.25	235.07	4599.46	26.74	20.19	26.74	33.51	37.06	.25
4700.00	.25	215.85	4699.46	26.44	19.89	26.44	33.08	36.95	.08
4800.00	.25	181.65	4799.46	26.04	19.75	26.04	32.69	37.18	.15
4900.00	.25	177.48	4899.46	25.61	19.76	25.61	32.34	37.65	.02
5000.00	.25	184.30	4999.45	25.17	19.75	25.17	31.99	38.12	.03
5100.00	.75	193.13	5099.45	24.32	19.58	24.32	31.22	38.85	.50
5200.00	.25	218.96	5199.45	23.51	19.30	23.51	30.42	39.38	.54
5300.00	.50	193.78	5299.44	22.92	19.06	22.92	29.80	39.75	.29
5400.00	.50	195.61	5399.44	22.07	18.84	22.07	29.02	40.48	.02
5500.00	.75	196.44	5499.43	21.02	18.53	21.02	28.03	41.40	.25
5600.00	.25	227.27	5599.43	20.25	18.19	20.25	27.22	41.93	.55
5700.00	.50	170.09	5699.43	19.67	18.10	19.67	26.73	42.62	.42
5800.00	.50	156.92	5799.42	18.84	18.35	18.84	26.30	44.25	.11
5900.00	.50	201.75	5899.42	18.03	18.36	18.03	25.73	45.51	.38
6000.00	.75	197.57	5999.42	17.00	18.00	17.00	24.76	46.63	.25
6100.00	.50	184.54	6099.41	15.94	17.77	15.94	23.87	48.10	.29
6200.00	.25	134.36	6199.41	15.36	17.89	15.36	23.58	49.36	.39
6300.00	.50	164.19	6299.40	14.78	18.16	14.78	23.42	50.86	.31
6400.00	1.00	139.02	6399.40	13.71	18.85	13.71	23.31	53.99	.59
6500.00	1.25	137.85	6499.38	12.24	20.16	12.24	23.58	58.74	.25
6600.00	1.00	145.68	6599.36	10.71	21.38	10.71	23.91	63.40	.29
6700.00	1.00	124.50	6699.34	9.49	22.59	9.49	24.51	67.21	.37
6800.00	1.25	142.33	6799.32	8.14	23.98	8.14	25.32	71.26	.43
6900.00	.75	149.16	6899.31	6.71	24.98	6.71	25.87	74.96	.51

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
7000.00	1.00	148.98	6999.30	5.40	25.77	5.40	26.33	78.16	.25
7100.00	1.00	137.81	7099.28	4.01	26.80	4.01	27.10	81.50	.19
7200.00	1.00	135.64	7199.27	2.74	28.00	2.74	28.13	84.42	.04
7300.00	1.00	165.56	7299.25	1.27	28.83	1.27	28.85	87.48	.52
7400.00	.75	141.59	7399.24	-.09	29.45	-.09	29.45	90.18	.44
7500.00	.75	146.62	7499.23	-1.15	30.22	-1.15	30.24	92.18	.07
7600.00	.50	170.64	7599.23	-2.13	30.65	-2.13	30.72	93.97	.36
7700.00	.50	174.67	7699.22	-2.99	30.76	-2.99	30.91	95.56	.04
7800.00	.75	186.70	7799.22	-4.08	30.72	-4.08	30.99	97.56	.28
7900.00	.75	151.73	7899.21	-5.30	30.96	-5.30	31.41	99.72	.45
8000.00	.75	140.75	7999.20	-6.39	31.68	-6.39	32.32	101.40	.14
8100.00	.75	152.78	8099.19	-7.48	32.40	-7.48	33.25	102.99	.16
8200.00	.75	156.81	8199.18	-8.66	32.95	-8.66	34.07	104.72	.05
8300.00	1.00	188.83	8299.17	-10.12	33.08	-10.12	34.59	107.02	.54
8400.00	1.00	172.86	8399.16	-11.85	33.05	-11.85	35.11	109.73	.28
8500.00	1.00	172.89	8499.14	-13.58	33.27	-13.58	35.93	112.21	.00
8600.00	1.50	172.05	8599.12	-15.74	33.56	-15.74	37.07	115.14	.50
8700.00	2.00	198.06	8699.07	-18.70	33.20	-18.70	38.10	119.39	.93
8800.00	2.00	204.09	8799.01	-21.95	31.94	-21.95	38.76	124.50	.21
8900.00	1.50	212.12	8898.96	-24.65	30.54	-24.65	39.25	128.92	.56
9000.00	1.50	197.15	8998.93	-27.01	29.45	-27.01	39.96	132.53	.39
9100.00	.25	246.18	9098.92	-28.35	28.87	-28.35	40.46	134.48	1.35
9200.00	.50	269.21	9198.91	-28.45	28.23	-28.45	40.08	135.22	.29
9300.00	.50	232.24	9298.91	-28.72	27.45	-28.72	39.73	136.29	.32
9400.00	.50	271.27	9398.91	-28.98	26.67	-28.98	39.38	137.37	.33
9500.00	1.00	257.29	9498.90	-29.16	25.38	-29.16	38.66	138.96	.53
9600.00	1.50	269.32	9598.87	-29.37	23.22	-29.37	37.44	141.66	.56
9700.00	1.25	291.35	9698.85	-28.98	20.90	-28.98	35.73	144.21	.58
9800.00	1.25	293.33	9798.82	-28.16	18.88	-28.16	33.90	146.16	.04
9900.00	1.50	314.26	9898.79	-26.81	16.94	-26.81	31.71	147.71	.56

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
10000.00	1.75	317.19	9998.75	-24.78	14.97	-24.78	28.95	148.87	.26
10100.00	2.00	316.12	10098.70	-22.40	12.72	-22.40	25.76	150.41	.25
10200.00	1.75	332.04	10198.65	-19.79	10.79	-19.79	22.54	151.40	.58
10300.00	1.25	335.96	10298.61	-17.45	9.63	-17.45	19.93	151.10	.51
10400.00	1.00	21.88	10398.60	-15.64	9.51	-15.64	18.31	148.69	.91
10500.00	1.25	50.81	10498.58	-14.14	10.68	-14.14	17.72	142.93	.61
10600.00	1.25	68.74	10598.55	-13.06	12.55	-13.06	18.11	136.14	.39
10700.00	1.00	61.67	10698.53	-12.25	14.33	-12.25	18.85	130.52	.29
10800.00	1.00	32.59	10798.52	-11.10	15.57	-11.10	19.12	125.48	.50
10900.00	.25	276.52	10898.52	-10.34	15.82	-10.34	18.90	123.16	1.13
11000.00	.25	229.45	10998.51	-10.46	15.44	-10.46	18.65	124.11	.20
11100.00	.25	226.01	11098.51	-10.75	15.12	-10.75	18.55	125.41	.02
11200.00	.25	126.94	11198.51	-11.03	15.13	-11.03	18.73	126.09	.38
11300.00	.25	215.86	11298.51	-11.34	15.18	-11.34	18.95	126.76	.35
11400.00	.25	202.79	11398.51	-11.72	14.97	-11.72	19.01	128.05	.06
11500.00	.25	165.72	11498.51	-12.13	14.94	-12.13	19.24	129.08	.16
11600.00	.25	130.65	11598.51	-12.48	15.16	-12.48	19.64	129.48	.15
11700.00	.25	125.57	11698.51	-12.75	15.50	-12.75	20.07	129.45	.02
11800.00	.50	112.50	11798.51	-13.05	16.08	-13.05	20.71	129.05	.26
11900.00	.25	128.43	11898.50	-13.35	16.65	-13.35	21.34	128.71	.27
12000.00	.50	160.35	11998.50	-13.90	16.97	-13.90	21.94	129.31	.32
12100.00	.50	165.28	12098.50	-14.73	17.23	-14.73	22.67	130.52	.04
12200.00	1.00	185.26	12198.49	-16.02	17.26	-16.02	23.55	132.86	.56
12300.00	1.25	200.28	12298.47	-17.91	16.80	-17.91	24.56	136.83	.38
12400.00	1.75	194.33	12398.44	-20.41	16.05	-20.41	25.97	141.83	.52

Last Survey Depth Recorded									
12428.00	1.50	197.36	12426.42	-21.18	15.83	-21.18	26.44	143.22	.94

COMPANY: BOPCO, L.P.

WELL: Poker Lake Unit #199

FIELD: Wildcat

COUNTY: Eddy

STATE: New Mexico

COUNTY: Eddy Field: Wildcat Location: 1000' FSL & 1685' FWL Well: Poker Lake Unit #199 Company: BOPCO, L.P.	Schlumberger		PLATFORM EXPRESS HI-RES LATEROLOG ARRAY / MICRO-CFL FINAL COMPOSITE						
			1000' FSL & 1685' FWL		Elev.: K.B. 3492.7 ft G.L. 3459.5 ft D.F. 3491.2 ft				
	LOCATION		Permanent Datum: Ground Level Log Measured From: Kelly Bushing Drilling Measured From: Kelly Bushing		Elev.: 3459.5 ft 33.2 ft above Perm. Datum				
			API Serial No. 30-015-36506		SECTION 28		TOWNSHIP 24S		RANGE 31E
Logging Date		2-Mar-2009				11-Apr-2009			
Run Number		One				Two			
Depth Driller		12550 ft				14637 ft			
Schlumberger Depth		12558 ft				14644 ft			
Bottom Log Interval		12548 ft				14641 ft			
Top Log Interval		4341 ft				12554 ft			
Casing Driller Size @ Depth		13.375 in @ 4345 ft				9.625 in @ 12550			
Casing Schlumberger		4341 ft				12558 ft			
Bit Size		12.125 in				8.500 in			
Type Fluid In Hole		Cut Brine				Brine / Starch / Salt Gel			
MUD	Density	Viscosity	9.2 lbm/gal	28 s	13.9 lbm/gal		42 s		
	Fluid Loss	PH		9.5	12.8 cm3		8		
	Source Of Sample		Circulation Tank				Circulation Tank		
	RM @ Measured Temperature		0.078 ohm.m @ 70 degF				0.069 ohm.m @ 70 degF		
RMF @ Measured Temperature		0.058 ohm.m @ 70 degF				0.035 ohm.m @ 70 degF			
RMC @ Measured Temperature		@				@			
Source RMF		RMC	Measured		Measured				
RM @ MRT		RMF @ MRT	0.031 @ 185	0.023 @ 185	0.025 @ 208	0.012 @ 208			
Maximum Recorded Temperatures		185 degF				208 degF			
Circulation Stopped		Time	1-Mar-2009 21:30		10-Apr-2009				
Logger On Bottom		Time	2-Mar-2009 13:00		11-Apr-2009		13:15		
Unit Number		Location		2323 Roswell, N.M.		2323 Roswell, N.M.			
Recorded By		Natalia Castano				Daniel Martinez			
Witnessed By		Jack Bartlett				Brian Pregger			

COMPANY: BOPCO, L.P.

WELL: Poker Lake Unit #199

FIELD: Wildcat

COUNTY: Eddy STATE: New Mexico

COUNTY: Eddy Field: Wildcat Location: 1000' FSL & 1685' FWL Well: Poker Lake Unit #199 Company: BOPCO, L.P.	Schlumberger		PLATFORM EXPRESS			
			NEUTRON / DENSITY			
	LOCATION		1000' FSL & 1685' FWL		Elev.: K.B. 3492.7 ft G.L. 3459.5 ft D.F. 3491.2 ft	
	Permanent Datum: Ground Level		Elev.: 3459.5 ft			
	Log Measured From: Kelly Bushing		33.2 ft above Perm. Datum			
Drilling Measured From: Kelly Bushing						
API Serial No. 30-015-36506		SECTION 28		TOWNSHIP 24S		
				RANGE 31E		
MUD	Logging Date		2-Mar-2009		11-Apr-2009	
	Run Number		One		Two	
	Depth Driller		12550 ft		14637 ft	
	Schlumberger Depth		12558 ft		14644 ft	
	Bottom Log Interval		12548 ft		14641 ft	
	Top Log Interval		200 ft		12554 ft	
	Casing Driller Size @ Depth		13.375 in @ 4345 ft		9.625 in @ 12550 ft	
	Casing Schlumberger		4341 ft		12558 ft	
	Bit Size		12.125 in		8.500 in	
	Type Fluid In Hole		Cut Brine		Brine / Starch / Salt Gel	
	Density	Viscosity	9.2 lbm/gal	28 s	13.9 lbm/gal	42 s
	Fluid Loss	PH	9.5		12.8 cm3	8
	Source Of Sample		Circulation Tank		Circulation Tank	
	RM @ Measured Temperature		0.078 ohm.m @ 70 degF		0.069 ohm.m @ 70 degF	
	RMF @ Measured Temperature		0.058 ohm.m @ 70 degF		0.035 ohm.m @ 70 degF	
	RMC @ Measured Temperature		@		@	
	Source RMF	RMC	Measured		Measured	
	RM @ MRT	RMF @ MRT	0.031 @ 185	0.023 @ 185	0.025 @ 208	0.012 @ 208
	Maximum Recorded Temperatures		185 degF		208 degF	
	Circulation Stopped	Time	1-Mar-2009	21:30	10-Apr-2009	
Logger On Bottom	Time	2-Mar-2009	13:00	11-Apr-2009	13:15	
Unit Number	Location	2323	Roswell, N.M.	2323	Roswell, N.M.	
Recorded By		Natalia Castano		Daniel Martinez		
Witnessed By		Jack Bartlett		Brian Pregger		