

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB NO. 1004-0137
Expires: March 31, 2007

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other		5. Lease Serial No. LC068545
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr., Other _____		6. If Indian, Allottee or Tribe Name
2. Name of Operator BOPCO, L.P.		7. Unit or CA Agreement Name and no. NMNM71016X
3. Address P O Box 2760 Midland Tx 79702		8. Lease Name and Well No. Poker Lake Unit 265H
3.a. Phone No. (Include area code) (432)683-2277		9. API Well No. 30-015-35614
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At Surface UL M Sec. 6, T24S, R30E, 660 FWL, 660 FSL, Lat N32.142757, Long. W103.553682 At top prod. interval reported below Same At total depth 615.46 FSL, 7342.40, FWL Sec. 5, T24S, R30E		10. Field and Pool, or Exploratory Undesignated (Bone Spring)
14. Date Spudded 04/15/2009		11. Sec., T., R., M., on Block and Survey or Area 6:T24S;R30E
15. Date T.D. Reached 05/27/2009		12. County or Parish Eddy
16. Date Completed ☐ D & A ☒ Ready to Prod. 07/03/2009		13. State NM
17. Elevations (DF, RKB, RT, GL)* GL 3167.2		

CONFIDENTIAL

18. Total Depth: MD 14,769.00 TVD 8,373.95	19. Plug Back T.D.: MD NA TVD NA	20. Depth Bridge Plug Set: MD NA TVD NA
21. Type of Electric & Other Mechanical Logs Run (Submit copy of each) Platform Express Three Dectector Litho-Density Compensated Neutron/GR Platform Express Array Induction Tool Micro-CFL/GR		22. Was well cored? ☒ No ☐ Yes (Submit analysis) Was DST run? ☒ No ☐ Yes (Submit analysis) Directional Survey? ☐ No ☒ Yes (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17-1/2	13-3/8	48		719		660 E CC		Surf	
12-1/4	9-5/8	40		3,449		1,300 CCP+		Surf	
8-3/4	7	26		8,598		245 E P+		1865 (TS)	
6-1/8	4-1/2	11.6	7720	14,616				NA L.Hanger	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
NA								

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Bone Spring	8190	14,585	8820 - 14,585	0.38	120	Producing
B)						
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
See Attachment	

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
7/3/09	7/14/09	24	→	442	1,628	1,379	41.7		Flowing
Choice Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	
34/128	SI NA	920	→				3683	PRODUCING	

Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	
	SI		→						

(See Instructions and spaces for additional data on page 2)

RECEIVED

SEP 15 2010

NMOCD ARTESIA

ACCEPTED FOR RECORD

JUL 27 2009

/s/ Myles Kristof

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas : Oil Ratio	Well Status	

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones or porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
				Rustler	330
				Salt	746
				Base/Salt	3238
				Lamar	3450
				Bell Canyon	3480
				Cherry Canyon	4320
				Lo. Cherry Canyon	5560
				Brushy Canyon	5620
				Lo. Brushy Canyon	6917
				Base S. Lime	7180
				Avalon Sand	7277

32. Additional remarks (include plugging procedure):

Continuation from item 31: Formation (Log) Markers:

Base Avalon Sand 7318

Bone Spring I 8190

ALL DEPTHS ARE MEASURED DEPTHS UNLESS OTHERWISE STATED.

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- ☒ Electrical/Mechanical Logs (1 full set req'd.)
 ☐ Geological Report
 ☐ DST Report
 ☒ Directional Survey
☐ Sundry Notice for plugging and cement verification
☐ Core Analysis
☐ Other

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (please print) Sandra J. Belt ext. 149 Title Regulatory ClerkSignature  Date 07/17/2009

Title 18 U.S.C. Section 101 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States and false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Attachment to Form 3160-4
Item 27
Frac and Depth Interval
7/16/09

Page 1 of 2

06/24/2009

- Stage 1 Frac perf @ 14585' w/30 bbls 30# linear, 1386 bbls XL Borate w/ 148,602 lbs 16/30 Ottawa sand.
- Stage 2 Frac perf @ 14298 w/134 bbls SW, 30 bbls 30 lb linear, 1346 bbls Borate w/ 145,626 lbs 16/30 Ottawa sand.
- Stage 3 Frac perf @ 13972' w/165 bbls SW, 64 bbls 30 lb linear, 1398 bbls XL Borate w/ 149,058 lbs 16/30 Ottawa sand.
- Stage 4 Frac perf @ 13,645 w/105 bbls SW, 98 bbls 30 lb linear, 1351 bbls XL Borate w/ 147024 lbs 16/30 Ottawa sand.

06/25/2009

Clean out post stage 5 screen out.

06/26/2009

- Stage 5 Frac perf @ 13282 w/91 bbls 30# linear, 1061 bbls 30# XL borate w/ 88370 lbs 16/30 Ottawa sand.
- Stage 6 Frac perf @ 12,733' w/265 bbls SW, 146 bbls 30 # linear, 1437 bbls 30 lb XL borate w/ 149445 16/30 Ottawa sand.
- Stage 7 Frac perf @ 12,390 w/12 SW, 82 bbls 30# linear, 1479 bbls 30# XL borate w/ 153784 lbs 16/30 Ottawa sand.
- Stage 8 Frac perf @ 11896' W/66 bbls SW, 157 bbls 30# linear, 1418 bbls 30# XL Borate w/158825 lbs 16/30 Ottawa sand.
- Stage 9 Frac perf @ 11533 w/40 bbls 15% HCl, 138 SW, 131 bbls 30 # linear, 1419 bbls 30# XL borate w/153096 lbs 16/30 Ottawa sand.
- Stage 10 Frac perf @ 11169' w/38 bbls 15% HCl, 119 SW, 108 bbls 30 # linear, 1380 bbls 30 lb XL borate w/ 151496 16/30 Ottawa sand.
- Stage 11 Frac perf @ 10683' w/14 bbls 15% HCl, 130 bbls SW, 114 bbls 30# linear, 1830 bbls 30# XL borate w/ 162534 lbs 16/30 Ottawa sand.
- Stage 12 Frac perfs @ 10240'-244' w/ 67 bbls SW, 48 bbls 15% HCL, 140 bbls SW, 146 bbls 30# linear, 1448 bbls 30# XL borate w/ 158200 lbs Ottawa sand.
- Stage 13 Frac perfs @ 9895'-99' w/73 bbls SW, 50 bbls 15% HCl, 182 bbls SW, 40 bbls 30# linear, 1171 bbls 30# XL borate w/ 157680 lbs Ottawa sand.
- Stage 14 Frac perfs @ 9551'-55' w/77 SW, 64 bbls 15% HCl, 98 bbls SW, 74 bbls 30# linear, 1160 bbls 30# XL borate w/ 157,320 lbs 16/30 Ottawa sand.

	Stage 15	Frac perfs @ 9083'-87' w/114 bbls SW, 50 bbls 15% HCl, 60 bbls SW, 176 bbls 30# linear, 942 bbls 30# XL borate w/ 100,640 lbs Ottawa sand.
	Stage 16	Frac perfs @ 8820'-24' w/182 SW, 55 bbls 15% HCl, 57 bbls SW, 103 bbls 30# linear, 915 bbls 30# XL borate w/ 150300 lbs Ottawa sand.
06/27/2009	Stage 17	Frac perfs @ 8520-24 w/81 SW, 55 bbls 120 BBLS 15% HCL, 164 bbls SW, 32 bbls 30# linear, 1277 bbls 30# XL borate w/ 86120 lbs 16/30 Ottawa sand.

DISTRICT I
1825 N. French Dr., Hobbs, NM 88240

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised October 12, 2005

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-35614	Pool Code	Pool Name Undesignated (Bone Spring)
Property Code 306402	Property Name POKER LAKE UNIT	Well Number 265H
OGRID No. 260737	Operator Name BOPCO, L.P.	Elevation 3166'

Surface Location

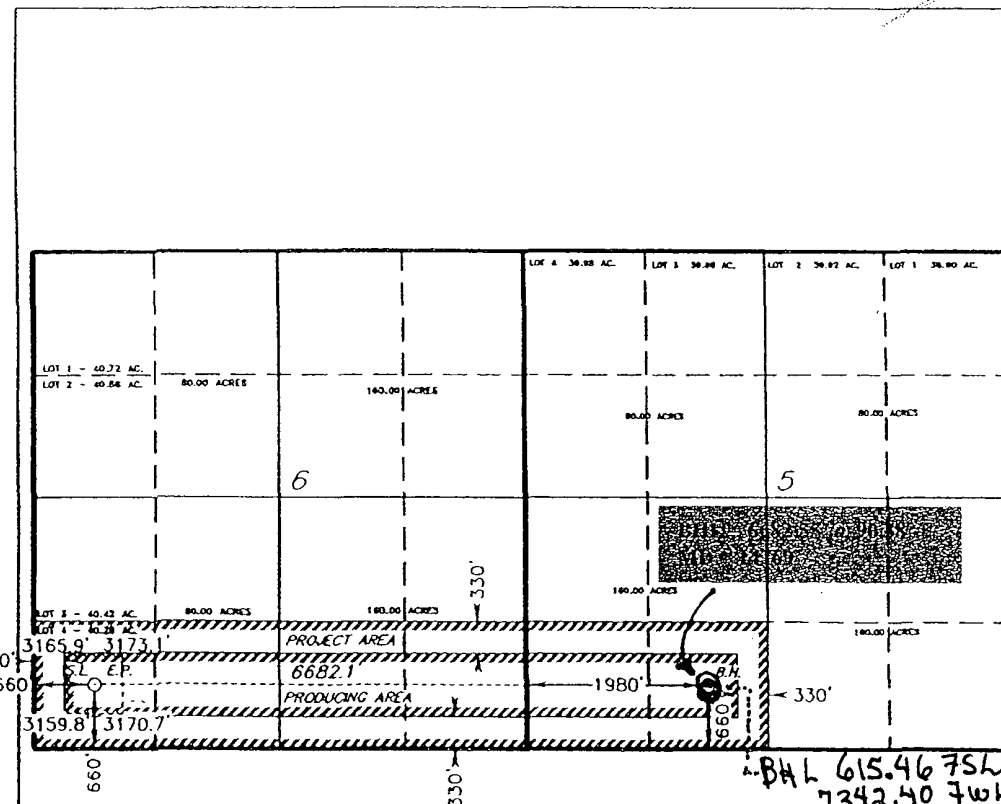
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
LOT 4	6	24 S	30 E		660	SOUTH	660	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	5	24 S	30 E		660	SOUTH	1980	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature _____ Date _____

Printed Name _____

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

MAY 1 2009

Date Surveyed _____
Signature _____
Professional Surveyor

[Handwritten signature and stamp]

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

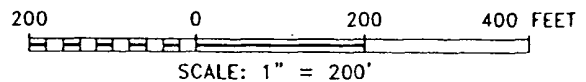
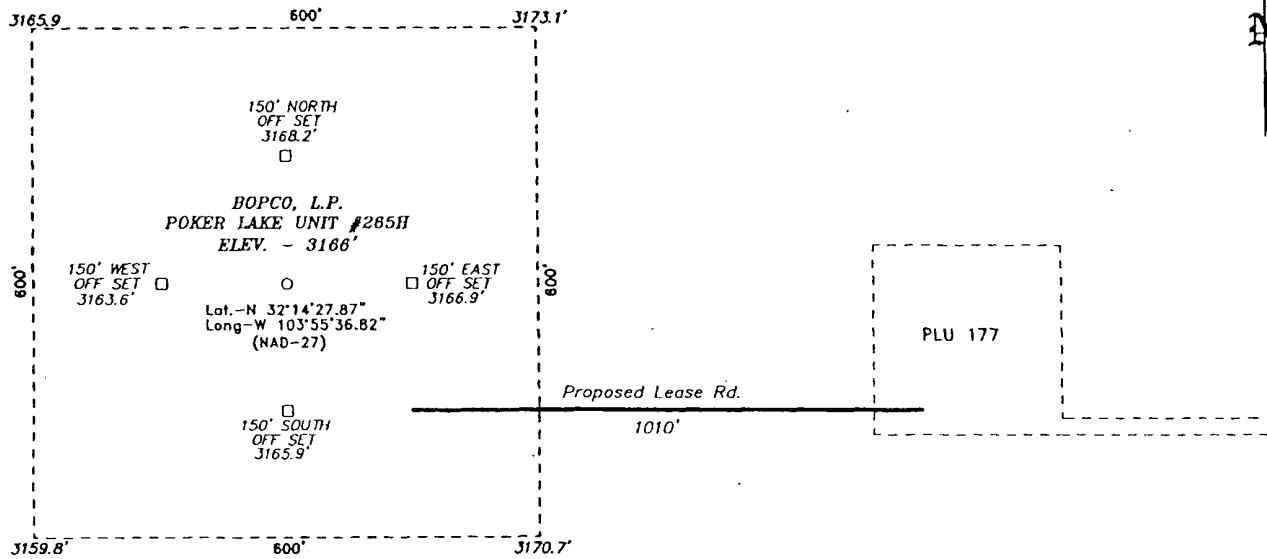
SURFACE LOCATION
Lat - N 32°14'27.87"
Long - W 103°55'36.82"
NMSPC - N 451659.664
E 625663.524
(NAD-27)

DELAWARE ENTRY POINT
Lat - N 32°14'27.87"
Long - W 103°55'36.82"
NMSPC - N 451659.664
E 625663.524
(NAD-27)

BOTTOM HOLE LOCATION
Lat - N 32°14'28.24"
Long - W 103°54'19.02"
NMSPC - N 451722.226
E 632345.573
(NAD-27)

BH 615.46 75h
7342.40 7wL

SECTION 6, TOWNSHIP 24 SOUTH, RANGE 30 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



DIRECTIONS TO LOCATION:

FROM THE INTERSECTION OF STATE HWY 128 AND CO. RD. 793 (RAWHIDE ROAD), GO SOUTH 7.3 MILES TO LEASE ROAD, THEN WEST ON LEASE ROAD FOR 0.2 MILES TO POKER LAKE 177 AND BEGIN PROPOSED LEASE ROAD.

BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: 6078 Drawn By: K. GOAD

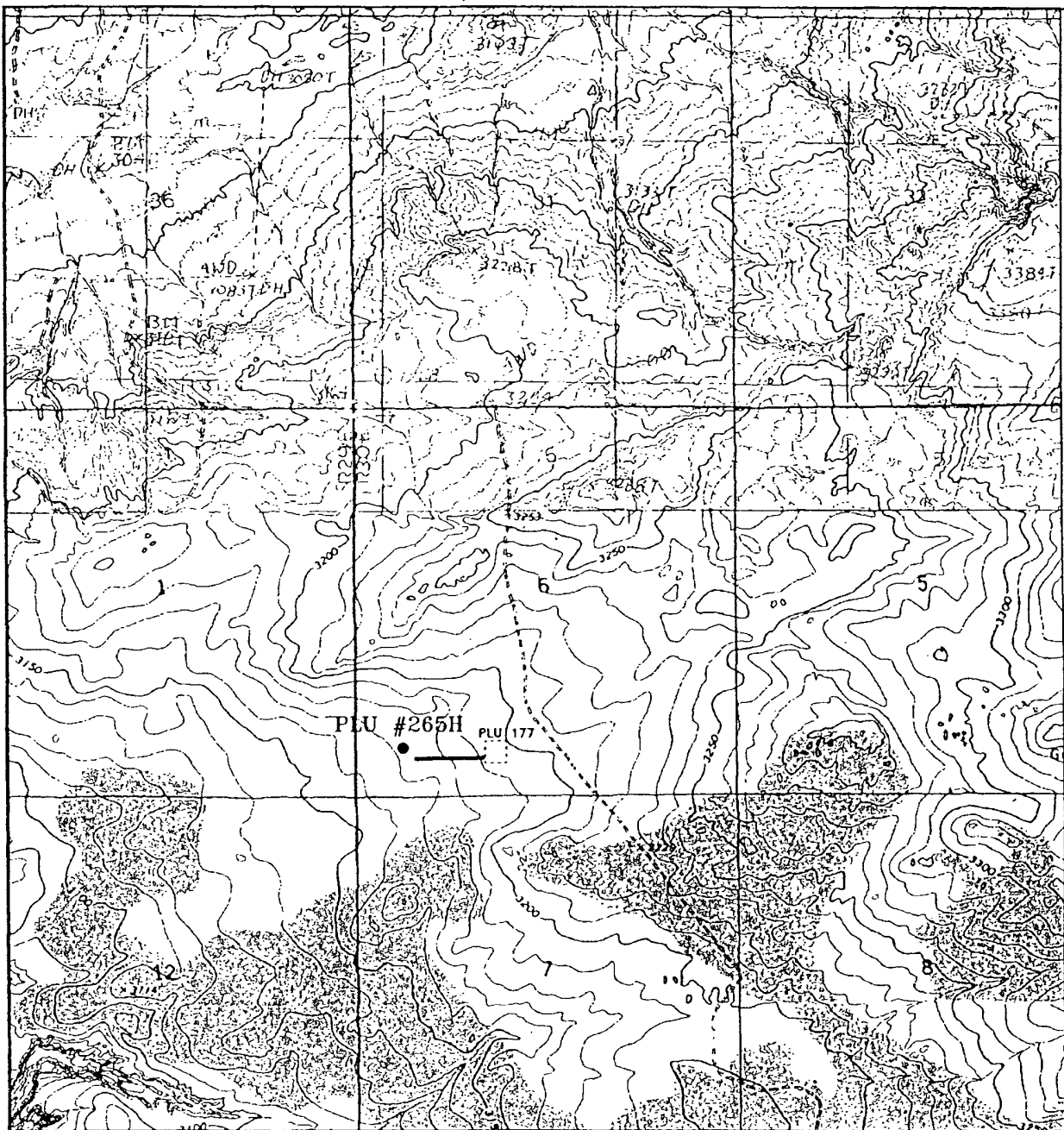
Date: 03-18-2009 Disk: KJG - 6078A.DWG

BOPCO, L.P.

REF: POKER LAKE UNIT #265H / WELL PAD AND TOPO

THE POKER LAKE UNIT No. 265H LOCATED 660'
FROM THE SOUTH LINE AND 660' FROM THE WEST LINE OF
SECTION 6, TOWNSHIP 24 SOUTH, RANGE 30 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 03-17-2009 Sheet 1 of 1 Sheets



POKER LAKE UNIT #265H

660' FSL and 660' FWL

Section 6, Township 24 South, Range 30 East,
N.M.P.M., Eddy County, New Mexico.

basin
surveys
focused on excellence
in the oilfield

P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(575) 393-7316 - Office
(575) 392-2206 - Fax
basinsurveys.com

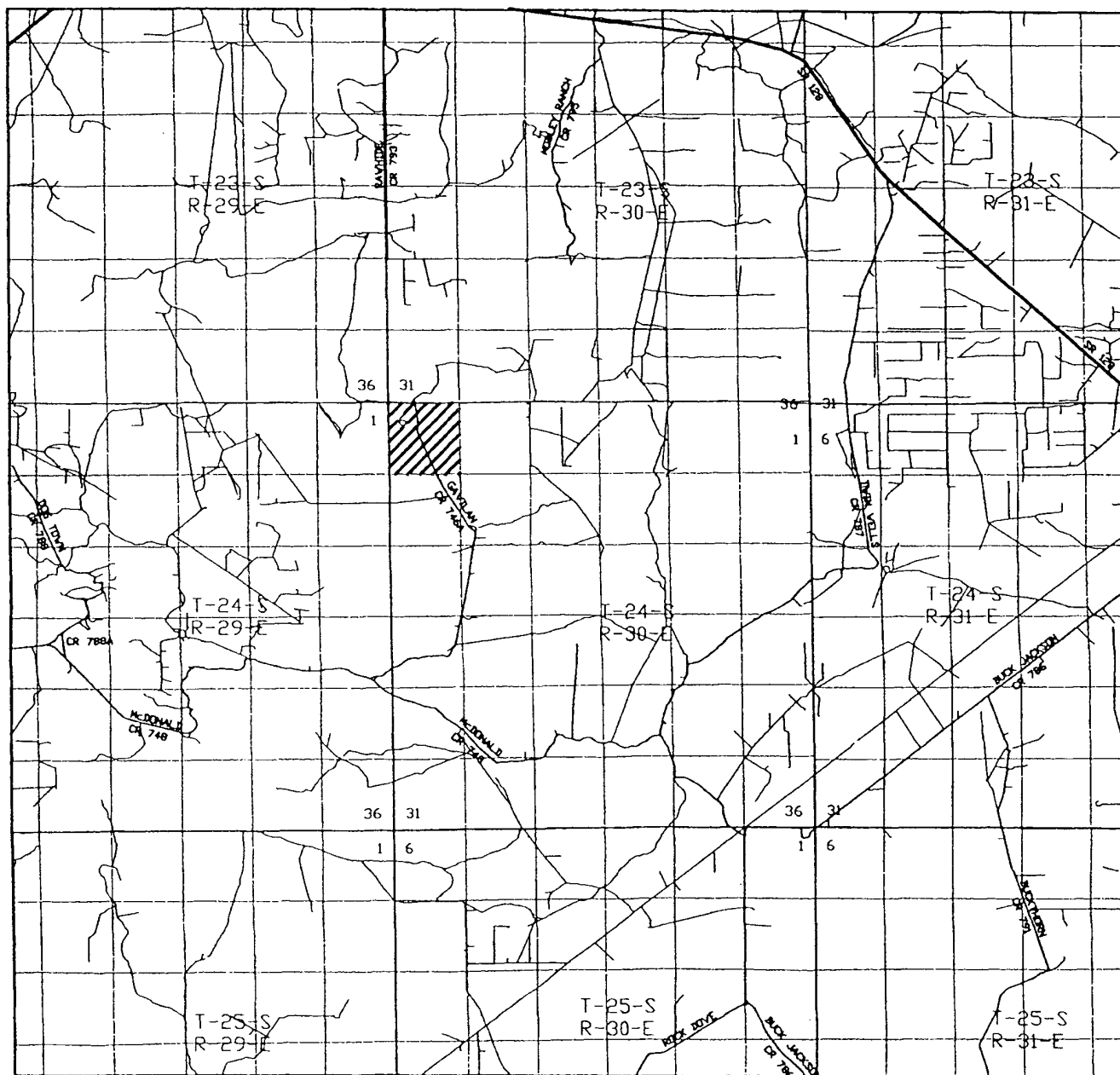
W.O. Number: KJG - 6078AA

Survey Date: 03-17-2009

Scale: 1" = 2000'

Date: 03-18-2009

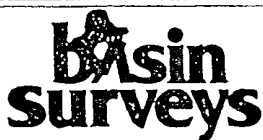
BOPCO, L.P.



POKER LAKE UNIT #265H

660' FSL and 660' FWL

Section 6, Township 24 South, Range 30 East,
N.M.P.M., Eddy County, New Mexico.



focused on excellence
in the oilfield

P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(575) 393-7316 - Office
(575) 392-2206 - Fax
basinsurveys.com

W.O. Number: KJG -- 6078AA

Survey Date: 03-17-2009

Scale: 1" = 2 MILES

Date: 03-18-2009

BOPCO, L.P.



VLT

An Operating Unit of Smith International, Inc.

DIRECTIONAL SURVEY REPORT

BOPCO, L.P.

POKER LAKE UNIT # 265H

EDDY COUNTY, NEW MEXICO

PREPARED BY: FRANCISCO SINISTERRA

Pathfinder Energy Services, Inc.
6213 W. Interstate 20 • Midland, TX • 79706
(432) 681-6000

A handwritten signature in black ink, located in the bottom right corner of the page. The signature appears to be "F. Sinisterra".

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) RAFAEL DONARUMMA
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 04/17/09 TO 05/16/09
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: EDDY COUNTY, NM
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

BOPCO, L.P.
POKER LAKE UNIT # 265H
EDDY COUNTY, NM
RIG: HELMERICH & PAYNE, INC. # 317

9. SURVEY CERTIFIED FROM: 7704 TO 14690 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 6682.55 FEET ON A BEARING OF 90.38 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 14769 FEET, ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.



FRANCISCO SINISTERRA
M/LWD SERVICE COORDINATOR

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 04/25/2009
Date Completed: 05/16/2009

BOPCO, L.P.
POKER LAKE UNIT #265H
EDDY COUNTY, NM
Rig:HELMERICH & PAYNE #317
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers:J.FALLIN
H.DONARUMMA

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.14.27.8729 N LON:103.55.36.8208 W
GRID Reference:NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 625663.5240 Y: 451659.6640
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.78° EAST TO GRID
Vertical Section Plane: 89.46
Survey Vert. Reference: 25.00' Rotary Table To Ground
Altitude:3191.00' Ground To MSL

Measured Depth	14769.00	(feet)
Inclination	88.64	(deg)
Azimuth	90.97	(deg)
True Vertical Depth	8373.95	(feet)
Vertical Section	6681.68	(feet)
Survey X cord	632345.92	(feet)
Survey Y cord	451615.13	(feet)
Survey Lat	32.24088200 N	(deg)
Survey Lon	103.90528258 W	(deg)
Rectangular Corr. N/S	44.54 S	(feet)
Rectangular Corr. E/W	6682.40 E	(feet)
Closure Distance	6682.55	(feet)
Direction of Closure	90.38	(deg)
Dogleg Severity	0.00	(deg/100ft)

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)	Closure Dist (ft)	DLS (dg/100ft)
TIE IN TO SCIENTIFIC GYRO SURVEY @ 7690' MD								
7690.00	1.43	77.61	7689.43	0.00	2.60	58.42 S 3.15 E	58.50@ 176.91	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS								
7704.00	1.06	62.46	7703.43	14.00	2.89	58.32 S 3.44 E	58.42@ 176.63	3.52
7766.00	5.98	73.94	7765.29	62.00	6.51	57.16 S 7.05 E	57.60@ 172.97	7.98
7797.00	10.20	75.83	7795.98	31.00	10.74	56.04 S 11.26 E	57.17@ 168.64	13.64
7828.00	14.16	80.16	7827.25	32.00	17.36	54.68 S 17.87 E	57.53@ 161.90	12.69
7861.00	15.30	84.32	7858.20	32.00	25.42	53.59 S 25.93 E	59.54@ 154.18	4.86
7892.00	16.62	83.30	7888.00	31.00	33.91	52.67 S 34.40 E	62.91@ 146.85	4.35
7923.00	18.55	82.53	7917.55	31.00	43.21	51.51 S 43.70 E	67.55@ 139.69	6.27
7955.00	21.46	84.02	7947.62	32.00	54.09	50.24 S 54.57 E	74.17@ 132.64	9.23
7986.00	23.30	86.33	7976.28	31.00	65.86	49.26 S 66.33 E	82.62@ 126.60	6.58
8018.00	24.89	89.15	8005.50	32.00	78.91	48.75 S 79.38 E	93.15@ 121.56	6.13
8049.00	27.61	90.95	8033.30	31.00	92.62	48.78 S 93.09 E	105.09@ 117.65	9.14
8081.00	30.25	90.11	8061.30	32.00	108.10	48.91 S 108.56 E	119.07@ 114.25	8.35
8112.00	32.36	87.83	8087.79	31.00	124.20	48.62 S 124.66 E	133.81@ 111.30	7.80
8144.00	34.38	84.26	8114.51	32.00	141.76	47.39 S 142.21 E	149.90@ 108.43	8.80
8175.00	36.93	82.53	8139.70	31.00	159.73	45.30 S 160.16 E	166.44@ 105.79	8.85
8207.00	39.75	83.89	8164.80	32.00	179.46	42.96 S 179.87 E	184.93@ 103.43	9.20
8238.00	42.82	85.54	8188.09	31.00	199.84	41.09 S 200.23 E	204.41@ 101.60	10.51
8269.00	46.69	86.17	8210.10	31.00	221.62	39.51 S 222.00 E	225.49@ 100.09	12.57
8301.00	51.62	85.97	8231.02	32.00	245.77	37.85 S 246.14 E	249.03@ 98.74	15.41
8332.00	57.33	85.34	8249.03	31.00	270.94	35.94 S 271.29 E	273.66@ 97.55	18.49
8364.00	62.70	84.79	8265.01	32.00	298.56	33.55 S 298.89 E	300.77@ 96.40	16.85
8395.00	68.06	84.67	8277.92	31.00	326.64	30.96 S 326.94 E	328.41@ 95.41	17.29
8427.00	72.98	84.85	8288.59	32.00	356.69	28.21 S 356.98 E	358.09@ 94.52	15.38

PathFinder Energy Services, Inc. Survey Report

BOPCO, L.P.
POKER LAKE UNIT #265H
EDDY COUNTY, NM
RIG:HELMERICH & PAYNE #317

Page 02/07

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
8458.00	78.26	84.94	8296.29	31.00	386.62	25.54 S 386.88 E	387.72@ 93.78	17.03
8540.00	88.16	83.42	8305.26	82.00	467.65	17.27 S 467.84 E	468.15@ 92.11	13.42
8634.00	90.13	83.37	8305.84	94.00	561.12	6.46 S 561.21 E	561.25@ 90.66	1.03
8665.00	90.92	83.24	8305.56	31.00	591.94	2.85 S 592.00 E	592.00@ 90.28	2.58
8697.00	92.15	82.88	8304.70	32.00	623.73	1.02 N 623.75 E	623.75@ 89.91	4.00
8761.00	92.07	82.42	8302.34	64.00	687.24	9.20 N 687.18 E	687.24@ 89.23	0.73
8855.00	91.01	83.88	8299.82	94.00	780.63	20.41 N 780.47 E	780.74@ 88.50	1.92
8951.00	91.19	84.17	8297.97	96.00	876.18	30.40 N 875.93 E	876.46@ 88.01	0.36
9046.00	91.10	84.36	8296.08	95.00	970.77	39.89 N 970.44 E	971.26@ 87.65	0.22
9140.00	86.61	85.67	8297.95	94.00	1064.44	48.05 N 1064.04 E	1065.12@ 87.41	4.98
9235.00	86.35	85.53	8303.79	95.00	1159.05	55.33 N 1158.58 E	1159.90@ 87.27	0.31
9330.00	88.29	85.79	8308.23	95.00	1253.73	62.51 N 1253.20 E	1254.76@ 87.14	2.06
9425.00	89.34	85.79	8310.19	95.00	1348.52	69.48 N 1347.92 E	1349.71@ 87.05	1.11
9520.00	89.25	85.16	8311.36	95.00	1443.28	76.98 N 1442.62 E	1444.67@ 86.95	0.67
9615.00	90.04	83.94	8311.95	95.00	1537.93	86.00 N 1537.18 E	1539.59@ 86.80	1.53
9711.00	90.66	84.02	8311.36	96.00	1633.48	96.07 N 1632.65 E	1635.48@ 86.63	0.65
9837.00	91.19	85.62	8309.33	126.00	1759.05	107.44 N 1758.12 E	1761.40@ 86.50	1.34
9932.00	89.16	86.56	8309.04	95.00	1853.88	113.92 N 1852.89 E	1856.39@ 86.48	2.35
10028.00	92.42	87.41	8307.72	96.00	1949.77	118.97 N 1948.73 E	1952.36@ 86.51	3.51
10122.00	93.30	87.61	8303.03	94.00	2043.60	123.04 N 2042.53 E	2046.23@ 86.55	0.96
10218.00	92.59	88.82	8298.09	96.00	2139.44	126.03 N 2138.35 E	2142.06@ 86.63	1.46
10313.00	91.45	89.40	8294.75	95.00	2234.38	127.50 N 2233.28 E	2236.91@ 86.73	1.35
10408.00	90.40	89.16	8293.21	95.00	2329.37	128.70 N 2328.26 E	2331.81@ 86.84	1.13
10503.00	89.87	90.70	8292.99	95.00	2424.36	128.81 N 2423.25 E	2426.67@ 86.96	1.71
10598.00	87.67	91.14	8295.03	95.00	2519.30	127.29 N 2518.21 E	2521.43@ 87.11	2.36
10693.00	85.82	90.62	8300.42	95.00	2614.11	125.83 N 2613.04 E	2616.07@ 87.24	2.02

PathFinder Energy Services, Inc. Survey Report

BOPCO, L.P.
POKER LAKE UNIT #265H
EDDY COUNTY, NM
RIG:HELMERICH & PAYNE #317

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
10788.00	89.52	91.06	8304.28	95.00	2708.99	124.44 N 2707.94 E	2710.80@ 87.37	3.92
10883.00	92.24	90.86	8302.82	95.00	2803.94	122.85 N 2802.91 E	2805.60@ 87.49	2.87
10978.00	91.63	90.90	8299.62	95.00	2898.86	121.39 N 2897.84 E	2900.38@ 87.60	0.64
11073.00	92.95	90.32	8295.82	95.00	2993.76	120.38 N 2992.76 E	2995.18@ 87.70	1.52
11168.00	92.24	90.44	8291.52	95.00	3088.65	119.75 N 3087.66 E	3089.98@ 87.78	0.76
11263.00	91.63	91.42	8288.31	95.00	3183.56	118.21 N 3182.59 E	3184.78@ 87.87	1.21
11358.00	90.57	91.77	8286.49	95.00	3278.48	115.57 N 3277.53 E	3279.57@ 87.98	1.18
11453.00	88.55	91.44	8287.22	95.00	3373.40	112.91 N 3372.49 E	3374.38@ 88.08	2.16
11548.00	90.31	90.84	8288.16	95.00	3468.35	111.02 N 3467.46 E	3469.24@ 88.17	1.96
11580.00	90.84	90.79	8287.84	32.00	3500.34	110.56 N 3499.45 E	3501.20@ 88.19	1.66
11611.00	89.34	90.63	8287.79	31.00	3531.33	110.18 N 3530.45 E	3532.17@ 88.21	4.87
11642.00	88.20	90.71	8288.46	31.00	3562.32	109.81 N 3561.44 E	3563.13@ 88.23	3.69
11674.00	88.46	90.98	8289.39	32.00	3594.29	109.34 N 3593.42 E	3595.09@ 88.26	1.17
11706.00	88.90	90.25	8290.13	32.00	3626.28	109.00 N 3625.41 E	3627.05@ 88.28	2.66
11737.00	88.55	89.56	8290.82	31.00	3657.27	109.05 N 3656.40 E	3658.03@ 88.29	2.50
11769.00	88.90	89.44	8291.53	32.00	3689.26	109.33 N 3688.40 E	3690.02@ 88.30	1.16
11800.00	87.41	90.38	8292.53	31.00	3720.24	109.38 N 3719.38 E	3720.99@ 88.32	5.68
11832.00	87.58	90.27	8293.93	32.00	3752.21	109.20 N 3751.35 E	3752.94@ 88.33	0.63
11864.00	87.05	89.66	8295.43	32.00	3784.17	109.22 N 3783.31 E	3784.89@ 88.35	2.52
11895.00	86.70	88.81	8297.11	31.00	3815.13	109.53 N 3814.26 E	3815.84@ 88.35	2.96
11927.00	87.85	90.61	8298.64	32.00	3847.09	109.79 N 3846.22 E	3847.79@ 88.36	6.67
11959.00	89.34	93.10	8299.42	32.00	3879.05	108.76 N 3878.19 E	3879.72@ 88.39	9.07
11990.00	89.16	94.62	8299.83	31.00	3909.95	106.67 N 3908.12 E	3910.58@ 88.44	4.94
12021.00	88.90	92.73	8300.35	31.00	3940.86	104.68 N 3940.05 E	3941.44@ 88.48	6.15
12053.00	86.79	92.36	8301.56	32.00	3972.79	103.26 N 3972.00 E	3973.34@ 88.51	6.69
12085.00	86.79	92.27	8303.35	32.00	4004.70	101.97 N 4003.92 E	4005.22@ 88.54	0.28

PathFinder Energy Services, Inc.

Survey Report

BOPCO, L.P.
POKER LAKE UNIT #265H
EDDY COUNTY, NM
RIG:HELMERICH & PAYNE #317

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
12116.00	86.88	92.52	8305.06	31.00	4035.61	100.68 N 4034.84 E	4036.10@ 88.57	0.86
12148.00	86.97	92.30	8306.78	32.00	4067.53	99.33 N 4066.77 E	4067.98@ 88.60	0.74
12180.00	87.67	93.00	8308.27	32.00	4099.44	97.86 N 4098.70 E	4099.87@ 88.63	3.09
12211.00	88.20	93.31	8309.39	31.00	4130.36	96.15 N 4129.63 E	4130.75@ 88.67	1.98
12243.00	88.55	93.43	8310.30	32.00	4162.27	94.27 N 4161.56 E	4162.63@ 88.70	1.16
12275.00	89.60	93.89	8310.81	32.00	4194.18	92.23 N 4193.49 E	4194.51@ 88.74	3.58
12307.00	90.40	94.55	8310.81	32.00	4226.07	89.87 N 4225.41 E	4226.36@ 88.78	3.24
12333.00	90.57	94.95	8310.59	26.00	4251.96	87.72 N 4251.32 E	4252.22@ 88.82	1.67
12364.00	90.40	94.74	8310.33	31.00	4282.82	85.10 N 4282.21 E	4283.05@ 88.86	0.87
12396.00	90.40	94.29	8310.11	32.00	4314.69	82.58 N 4314.11 E	4314.90@ 88.90	1.41
12428.00	90.48	94.21	8309.86	32.00	4346.58	80.21 N 4346.02 E	4346.76@ 88.94	0.35
12459.00	88.99	94.43	8310.00	31.00	4377.47	77.88 N 4376.93 E	4377.62@ 88.98	4.86
12491.00	89.16	94.36	8310.52	32.00	4409.34	75.43 N 4408.83 E	4409.47@ 89.02	0.57
12522.00	89.87	94.45	8310.78	31.00	4440.23	73.04 N 4439.74 E	4440.34@ 89.06	2.31
12554.00	89.78	94.31	8310.88	32.00	4472.11	70.60 N 4471.64 E	4472.20@ 89.10	0.52
12586.00	90.04	94.17	8310.93	32.00	4504.00	68.23 N 4503.55 E	4504.07@ 89.13	0.92
12617.00	90.04	94.42	8310.91	31.00	4534.89	65.91 N 4534.47 E	4534.95@ 89.17	0.81
12649.00	90.31	94.27	8310.81	32.00	4566.77	63.49 N 4566.38 E	4566.82@ 89.20	0.97
12681.00	89.87	93.54	8310.76	32.00	4598.67	61.31 N 4598.30 E	4598.71@ 89.24	2.66
12712.00	88.99	93.94	8311.07	31.00	4629.59	59.29 N 4629.23 E	4629.61@ 89.27	3.12
12743.00	87.58	93.32	8312.00	31.00	4660.49	57.33 N 4660.16 E	4660.51@ 89.30	4.97
12775.00	88.11	93.38	8313.20	32.00	4692.39	55.46 N 4692.08 E	4692.41@ 89.32	1.67
12807.00	88.81	93.42	8314.06	32.00	4724.31	53.56 N 4724.01 E	4724.31@ 89.35	2.19
12838.00	88.90	93.56	8314.68	31.00	4755.22	51.67 N 4754.95 E	4755.23@ 89.38	0.54
12870.00	88.64	93.74	8315.37	32.00	4787.13	49.64 N 4786.87 E	4787.13@ 89.41	0.99
12902.00	88.46	93.56	8316.18	32.00	4819.03	47.60 N 4818.80 E	4819.03@ 89.43	0.79

PathFinder Energy Services, Inc. Survey Report

BOPCO, L.P.
POKER LAKE UNIT #265H
EDDY COUNTY, NM
RIG:HELMERICH & PAYNE #317

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
12933.00	88.90	93.69	8316.89	31.00	4849.94	45.64 N 4849.73 E	4849.94@ 89.46	1.48
12965.00	88.99	93.82	8317.48	32.00	4881.85	43.55 N 4881.65 E	4881.85@ 89.49	0.49
12997.00	89.08	93.63	8318.02	32.00	4913.76	41.47 N 4913.58 E	4913.76@ 89.52	0.66
13034.00	88.37	92.69	8318.84	37.00	4950.67	39.43 N 4950.52 E	4950.67@ 89.54	3.18
13065.00	88.29	93.12	8319.75	31.00	4981.60	37.86 N 4981.46 E	4981.61@ 89.56	1.41
13097.00	88.29	92.91	8320.70	32.00	5013.52	36.17 N 5013.41 E	5013.54@ 89.59	0.66
13129.00	88.11	93.22	8321.71	32.00	5045.44	34.46 N 5045.34 E	5045.46@ 89.61	1.12
13161.00	88.02	93.25	8322.79	32.00	5077.36	32.66 N 5077.27 E	5077.38@ 89.63	0.30
13192.00	87.93	93.27	8323.88	31.00	5108.27	30.90 N 5108.21 E	5108.30@ 89.65	0.30
13223.00	88.29	93.63	8324.90	31.00	5139.18	29.03 N 5139.13 E	5139.21@ 89.68	1.64
13255.00	88.29	93.45	8325.86	32.00	5171.08	27.06 N 5171.06 E	5171.13@ 89.70	0.56
13286.00	88.20	93.30	8326.81	31.00	5201.99	25.23 N 5201.99 E	5202.05@ 89.72	0.56
13318.00	88.20	93.22	8327.81	32.00	5233.91	23.42 N 5233.92 E	5233.97@ 89.74	0.25
13349.00	88.02	93.03	8328.84	31.00	5264.83	21.73 N 5264.86 E	5264.90@ 89.76	0.84
13381.00	88.11	93.04	8329.92	32.00	5296.75	20.03 N 5296.79 E	5296.83@ 89.78	0.28
13413.00	87.85	93.37	8331.04	32.00	5328.66	18.25 N 5328.72 E	5328.76@ 89.80	1.31
13444.00	87.93	92.98	8332.19	31.00	5359.57	16.53 N 5359.66 E	5359.68@ 89.82	1.28
13476.00	87.93	93.10	8333.34	32.00	5391.49	14.83 N 5391.59 E	5391.61@ 89.84	0.38
13508.00	87.93	93.23	8334.50	32.00	5423.40	13.07 N 5423.52 E	5423.54@ 89.86	0.41
13539.00	87.93	92.73	8335.62	31.00	5454.32	11.46 N 5454.46 E	5454.47@ 89.88	1.61
13571.00	87.85	93.10	8336.80	32.00	5486.24	9.83 N 5486.40 E	5486.40@ 89.90	1.18
13603.00	87.58	92.99	8338.07	32.00	5518.16	8.13 N 5518.32 E	5518.33@ 89.92	0.91
13634.00	87.76	93.64	8339.33	31.00	5549.06	6.34 N 5549.25 E	5549.25@ 89.93	2.17
13666.00	87.41	93.75	8340.68	32.00	5580.94	4.28 N 5581.15 E	5581.15@ 89.96	1.15
13698.00	87.14	93.32	8342.20	32.00	5612.83	2.31 N 5613.05 E	5613.06@ 89.98	1.59
13729.00	86.97	92.91	8343.79	31.00	5643.72	0.63 N 5643.97 E	5643.97@ 89.99	1.43

PathFinder Energy Services, Inc.

Survey Report

BOPCO, L.P.
POKER LAKE UNIT #265H
EDDY COUNTY, NM
RIG:HELMERICH & PAYNE #317

Page 06/07

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
13761.00	86.97	92.88	8345.49	32.00	5675.62	0.99 S 5675.88 E	5675.88@ 90.01	0.09
13793.00	87.58	92.97	8347.01	32.00	5707.53	2.62 S 5707.80 E	5707.81@ 90.03	1.93
13825.00	87.67	95.29	8348.33	32.00	5739.39	4.92 S 5739.69 E	5739.69@ 90.05	7.25
13857.00	88.02	92.78	8349.54	32.00	5771.26	7.17 S 5771.59 E	5771.59@ 90.07	7.91
13888.00	88.11	93.09	8350.58	31.00	5802.19	8.76 S 5802.53 E	5802.54@ 90.09	1.04
13920.00	87.67	92.53	8351.76	32.00	5834.11	10.32 S 5834.47 E	5834.48@ 90.10	2.22
13951.00	88.20	92.76	8352.88	31.00	5865.04	11.75 S 5865.41 E	5865.43@ 90.11	1.86
13983.00	89.16	93.33	8353.62	32.00	5896.97	13.45 S 5897.36 E	5897.38@ 90.13	3.49
14015.00	89.43	93.28	8354.01	32.00	5928.90	15.30 S 5929.31 E	5929.33@ 90.15	0.86
14047.00	89.52	93.55	8354.30	32.00	5960.82	17.20 S 5961.25 E	5961.27@ 90.17	0.89
14078.00	89.08	93.15	8354.68	31.00	5991.75	19.01 S 5992.19 E	5992.22@ 90.18	1.92
14110.00	88.46	93.31	8355.37	32.00	6023.67	20.82 S 6024.13 E	6024.17@ 90.20	2.00
14142.00	88.20	93.08	8356.30	32.00	6055.59	22.60 S 6056.07 E	6056.11@ 90.21	1.08
14174.00	88.29	92.75	8357.28	32.00	6087.52	24.23 S 6088.01 E	6088.06@ 90.23	1.07
14205.00	88.11	92.81	8358.25	31.00	6118.45	25.73 S 6118.96 E	6119.02@ 90.24	0.61
14237.00	87.85	92.49	8359.38	32.00	6150.38	27.21 S 6150.91 E	6150.97@ 90.25	1.29
14268.00	88.02	92.32	8360.50	31.00	6181.32	28.51 S 6181.86 E	6181.93@ 90.26	0.78
14300.00	88.02	92.31	8361.61	32.00	6213.26	29.80 S 6213.82 E	6213.89@ 90.27	0.03
14332.00	87.93	92.29	8362.74	32.00	6245.20	31.08 S 6245.77 E	6245.85@ 90.29	0.29
14364.00	88.02	92.08	8363.87	32.00	6277.14	32.30 S 6277.73 E	6277.81@ 90.29	0.71
14395.00	88.37	92.31	8364.84	31.00	6308.09	33.49 S 6308.69 E	6308.78@ 90.30	1.35
14427.00	88.29	92.21	8365.78	32.00	6340.04	34.75 S 6340.65 E	6340.74@ 90.31	0.40
14458.00	88.37	92.24	8366.68	31.00	6370.99	35.95 S 6371.61 E	6371.71@ 90.32	0.28
14490.00	88.37	92.22	8367.59	32.00	6402.94	37.20 S 6403.57 E	6403.68@ 90.33	0.06
14522.00	88.46	91.87	8368.47	32.00	6434.90	38.34 S 6435.54 E	6435.66@ 90.34	1.13
14553.00	88.64	92.05	8369.26	31.00	6465.86	39.40 S 6466.51 E	6466.63@ 90.35	0.82

PathFinder Energy Services, Inc.

Survey Report

BOPCO, L.P.
POKER LAKE UNIT #265H
EDDY COUNTY, NM
RIG:HELMERICH & PAYNE #317

Page 07/07

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	Rectangular Offsets (ft)	TOTAL (ft)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
14585.00	88.99	91.93	8369.92	32.00	6497.82	40.51 S	6498.49 E	6498.61@ 90.36	1.16
14616.00	88.81	91.53	8370.52	31.00	6528.79	41.45 S	6529.47 E	6529.60@ 90.36	1.41
14648.00	88.90	91.42	8371.16	32.00	6560.76	42.27 S	6561.45 E	6561.59@ 90.37	0.44
14680.00	88.64	91.23	8371.84	32.00	6592.74	43.01 S	6593.44 E	6593.58@ 90.37	1.01
14690.00	88.64	90.97	8372.08	10.00	6602.73	43.20 S	6603.43 E	6603.57@ 90.37	2.60
14769.00	88.64	90.97	8373.95	79.00	6681.68	44.54 S	6682.40 E	6682.55@ 90.38	0.00

STRAIGHT LINE PROJECTION TO BIT @ 14769' MD

615.46 7SL
7342.40 7WL

ENERGY SERVICES

TIE-IN SURVEY INFORMATION SHEET

CLIENT INFORMATION

CLIENT:	BOPCO, L.P.		
LEASE / WELL No.:	POKER LAKE	UNIT #256H	
WELL LOCATION:	EDDY COUNTY		
COUNTY / STATE / COUNTRY:	EDDY	NEW MEXICO	U.S.A.
RIG:	H & P 317		
API WELL No:	30-015-35614		
JOB No:	101008417-WT-WT		
P.O. / AFE No.	24315		
DIRECTIONAL COMPANY:	PATHFINDER ENERGY		

WELL SITE INFORMATION

TOTAL MAGNETIC CORRECTION (TMC):			
On Wall Plat:	7.92	LWD Calculated:	7.779167
		Agreed Upon:	7.779167
X =	625663.524000	Feet	Y = 451659.664000 Feet
SITE LATITUDE:	32.241076 N	SITE LONGITUDE:	103.926895 W
GRID SYSTEM:	TRUE ☐ UTM ☐ LAMBERT ☒ ZONE: NEW MEXICO EAST		
PROPOSED DRIFT DIRECTION:	89.45		
KELLY BUSHING ELEVATION:	35 Feet		
ALTITUDE:	3191	Feet	WATER DEPTH: 0 Feet

TIE-IN SURVEY

MEASURED DEPTH:	7690
DRIFT ANGLE:	1.43
DRIFT DIRECTION:	77.61
TRUE VERTICAL DEPTH:	7689.43
VERTICAL SECTION:	2.6
RECTANGULAR COORDINATE (N / S) :	-58.42
RECTANGULAR COORDINATE (E / W) :	3.15
CLOSURE DISTANCE / DIRECTION:	
SURVEY CALCULATION METHOD:	AA ☐ MC ☒ RC ☐ BT ☐
SOURCE OF TIE-IN DATA (COMPANY) :	PATHFINDER ENERGY
COPY OF TIE-IN SURVEY REPORT	☒ YES ☐ NO

WELL PLAN

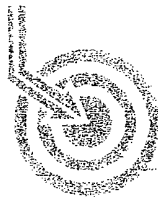
KICKOFF DEPTH:	7793.5	TOTAL DEPTH:	12368.87
KICKOFF ANGLE:	0	MAX ANGLE:	89.1

PES Engineers: JUSTIN FALLIN

**Signature of both field engineers required if applicable

Directional Driller: P.A. GONZALEZ /JESSE CALVERT

DATE: _____



Scientific Drilling

Gyroscopic Survey Report
for
B.A.S.S.

Well Location	EDDY COUNTY, NEW MEXICO
Well Name	POKER LAKE UNIT #265H
Rig Name	H & P #317
Survey Date	4/24/2009
Latitude	32.24 deg
North Reference	Grid North
Grid Correction	0.15 deg
Depth Reference	R.K.B.
Calculation Method	Minimum Curvature
Section (VS) Ref	0.00N (ft), 0.00E (ft), 89.45Azim (deg)
Definitive Survey	FINAL SURVEY
Operator	LEO GARZA

Comments



Well Name:		POKER LAKE UNIT #265H							
Survey:		FINAL SURVEY							
Survey Date:		4/24/2009							
MD	Inc	Azim	TVD	VS	Northing	Easting	DLS	Closure Distance	Closure Angle
ft	deg	deg	ft	ft	ft	ft	deg/100ft	ft	deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	Invalid	0.00	0.00
100.00	0.25	321.48	100.00	-0.13	0.17	-0.13	0.25	0.21	321.48
200.00	0.35	3.89	200.00	-0.24	0.64	-0.25	0.24	0.69	339.05
300.00	0.19	351.70	300.00	-0.24	1.12	-0.25	0.17	1.14	347.40
400.00	0.22	358.43	400.00	-0.26	1.48	-0.28	0.04	1.50	349.30
500.00	0.39	245.18	500.00	-0.58	1.53	-0.59	0.52	1.64	338.85
600.00	0.53	226.86	599.99	-1.23	1.07	-1.24	0.20	1.64	310.94
700.00	0.33	231.12	699.99	-1.79	0.57	-1.80	0.20	1.89	287.68
800.00	0.49	224.22	799.99	-2.33	0.08	-2.33	0.16	2.33	272.05
900.00	0.43	215.40	899.98	-2.85	-0.53	-2.84	0.09	2.89	259.43
1000.00	0.45	193.61	999.98	-3.16	-1.21	-3.15	0.17	3.38	248.93
1100.00	0.52	191.08	1099.98	-3.35	-2.04	-3.33	0.08	3.91	238.54
1200.00	0.48	195.38	1199.97	-3.56	-2.89	-3.53	0.06	4.56	230.71
1300.00	0.59	216.42	1299.97	-3.98	-3.71	-3.95	0.22	5.42	226.80
1400.00	0.69	219.25	1399.96	-4.68	-4.59	-4.63	0.10	6.52	225.29
1500.00	0.80	221.80	1499.95	-5.53	-5.57	-5.47	0.11	7.81	224.52
1600.00	1.00	233.17	1599.94	-6.70	-6.61	-6.63	0.27	9.36	225.12
1700.00	0.97	244.74	1699.93	-8.17	-7.49	-8.10	0.20	11.03	227.23
1800.00	0.95	244.32	1799.91	-9.69	-8.21	-9.61	0.02	12.64	229.49
1900.00	1.06	241.47	1899.90	-11.26	-9.01	-11.17	0.12	14.35	231.11
2000.00	0.75	232.01	1999.89	-12.59	-9.86	-12.50	0.34	15.92	231.74
2100.00	0.20	146.22	2099.88	-13.02	-10.41	-12.92	0.76	16.59	231.14
2200.00	0.30	135.29	2199.88	-12.74	-10.74	-12.63	0.11	16.58	229.63
2300.00	0.38	138.13	2299.88	-12.34	-11.17	-12.23	0.08	16.56	227.60
2400.00	0.50	151.57	2399.88	-11.92	-11.80	-11.80	0.16	16.69	225.01
2500.00	0.72	167.92	2499.87	-11.59	-12.80	-11.46	0.28	17.18	221.84
2600.00	0.93	149.63	2599.86	-11.06	-14.11	-10.92	0.33	17.85	217.74
2700.00	1.24	115.84	2699.84	-9.69	-15.28	-9.54	0.70	18.01	211.98
2800.00	1.28	114.66	2799.82	-7.71	-16.22	-7.55	0.05	17.89	204.97
2900.00	0.82	129.11	2899.80	-6.15	-17.14	-5.98	0.53	18.15	199.24
3000.00	0.84	128.98	2999.79	-5.03	-18.05	-4.86	0.02	18.69	195.06
3100.00	0.84	118.92	3099.78	-3.82	-18.87	-3.64	0.15	19.21	190.93
3200.00	1.37	123.72	3199.76	-2.20	-19.88	-2.01	0.53	19.98	185.77
3300.00	0.96	131.95	3299.74	-0.60	-21.10	-0.40	0.44	21.11	181.07
3400.00	0.56	190.84	3399.73	-0.08	-22.15	0.14	0.82	22.15	179.65
3500.00	0.76	187.16	3499.73	-0.26	-23.28	-0.04	0.20	23.28	180.10
3600.00	0.77	195.76	3599.72	-0.54	-24.59	-0.30	0.12	24.59	180.71
3700.00	0.72	183.48	3699.71	-0.77	-25.87	-0.53	0.17	25.87	181.16
3800.00	0.68	207.89	3799.70	-1.10	-27.02	-0.84	0.30	27.03	181.79



Well Name:		POKER LAKE UNIT #265H							
Survey:		FINAL SURVEY							
Survey Date:		4/24/2009							
MD	Inc	Azim	TVD	VS	Northing	Easting	DLS	Closure Distance	Closure Angle
ft	deg	deg	ft	ft	ft	ft	deg/100ft	ft	deg
7690.00	1.43	77.61	7689.43	2.59	-58.42	3.15	0.27	58.50	176.91

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

BOPCO, L.P.
POKER LAKE UNIT # 265H
EDDY COUNTY, NEW MEXICO
Rig:HP #317

Thu May 21 15:52:02 2009

Coordinates

Latitude: 32.241076 N (32 deg. 14 min. 27.8729 sec.)
Longitude: 103.926895 W (-103 deg. 55 min. 36.8208 sec.)
Elevation: 3191.00 feet.
Calculation Date: Apr/06/2009

Magnetic Calculations

Model: IGRF2005
Dip Angle: 60.2094 degrees
Total Magnetic Field: 0.48835 gauss
Magnetic Declination: 7.999563 degrees
Horizontal Intensity: 0.242630 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.999563 Degr

Transverse Mercator Grid Calculations NAD27

Grid System: Transverse Mercator: new mexico east
Ellipsoid: Clarke 1866
X: 625663.5240 feet
Y: 451659.6640 feet
True to Grid: (convergence) -0.216831 degrees
Magnetic to Grid: 7.782733 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.782733 Degr.