

Results of Directional Survey

API number:	30-025-40217		
OGRID:		Operator:	MACK ENERGY CORP
		Property:	CONDOR STATE # 2H

surface	ULSTR:	E	25	T	18S	R	34E
				2285	FNL	330	FWL

BH Loc	ULSTR:	H	25	T	18S	R	34E
12782	MD	9287.8	TVD	2231	FNL	4068	FWL
						1212	FEL

Top Perf/OH	ULSTR:	E	25	T	18S	R	34E
9831	MD	9286.2	TVD	2270	FNL	1120	FWL

Bot Perf/OH	ULSTR:	G	25	T	18S	R	34E
12584	MD	9287.7	TVD	2235	FNL	3870	FWL
						1410	FEL

	MD	N/S	E/W	VD
	9817	14.77	775.65	9286.11
TOP PERFS/OH	9831	14.65	789.65	9286.20
	9849	14.50	807.64	9286.32
	12569	50.14	3525.02	9287.23
BOT PERFS/OH	12584	50.46	3540.01	9287.73
	12601	50.82	3557.00	9288.30

NEXT TO LAST	12726	53.23	3681.96	9288.62
LAST READING	12782	54.05	3737.95	9287.80
TD	12782	54.05	3737.95	9287.80

Surface Location	2285	FN	330	FW
Projected BHL	2231	FN	4068	FW
Location of				
Top Perfs/OH	2270	FN	1120	FW
Bottom Perfs/OH	2235	FN	3870	FW

SUMMARY of Subsurface Locations

Surface Location	E-25-18S-34E	2285	FN	330	FW	Vert. Depth
Top Perfs/OH	E-25-18S-34E	2270	FN	1120	FW	9286.20
Bottom Perfs/OH	G-25-18S-34E	2235	FN	3870	FW	9287.73
Projected TD	H-25-18S-34E	2231	FN	4068	FW	9287.80



PO Box 1370
Artesia, NM 88211-1370
(575) 748-1288

HOBBS OCD

DEC 13 2011

RECEIVED

October 31, 2011

Mack Energy Corporation
PO Box 960
Artesia, NM 88211-0960

RE: Condor State #2
2285' FNL & 330' FWL
Sec. 25, T18S, R34E
Lea County, New Mexico

Dear Sir,

The attached is the Deviation Survey for the above captioned well.

SUR; E-25-18s-34e, 2285/N & 330/W
BHL; H-25-18s-34e, 2231/N & 4068/W
API # 30-025-40217

Very truly yours,

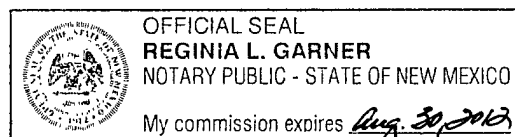
A handwritten signature in cursive script, appearing to read "Chris Graham".

Chris Graham
Drilling Superintendent

State of New Mexico }
County of Eddy }

The foregoing was acknowledged before me this 31st day of October, 2011.

A handwritten signature in cursive script, appearing to read "Regina L. Garner".

Notary Public

Pason DataHub Deviation Survey
 # Well Dossier 1313757518 - CONDOR STATE # 2
 #

# Date	Depth	Deviation	Direction	TVD
8/19/2011	161	0.30	231.80	0.00
8/20/2011	343	0.70	104.80	0.00
8/20/2011	522	0.20	122.80	0.00
8/20/2011	687	0.70	120.80	0.00
8/20/2011	865	0.80	100.80	0.00
8/20/2011	1058	0.60	128.80	0.00
8/21/2011	1229	0.50	133.80	0.00
8/21/2011	1417	0.70	107.80	0.00
8/22/2011	1599	0.50	161.80	0.00
8/22/2011	1783	0.60	169.80	0.00
8/24/2011	1946	0.90	229.80	0.00
8/24/2011	2132	1.80	227.80	0.00
8/24/2011	2315	2.30	233.80	2380.00
8/24/2011	2409	2.30	238.60	2474.00
8/25/2011	2595	1.90	230.80	0.00
8/25/2011	2782	1.70	234.80	0.00
8/25/2011	2973	0.80	230.80	0.00
8/25/2011	3160	0.40	244.80	0.00
8/25/2011	3345	0.10	346.80	0.00
8/25/2011	3532	1.50	4.80	3597.00
8/25/2011	3719	2.20	18.80	3784.00
8/26/2011	3901	2.50	9.80	0.00
8/26/2011	3998	2.50	3.80	0.00
8/26/2011	4092	2.80	357.80	0.00
8/26/2011	4185	3.00	2.80	0.00
8/27/2011	4234	2.90	358.88	0.00
8/27/2011	4327	1.85	327.85	0.00
8/27/2011	4421	0.44	306.32	0.00
8/27/2011	4514	0.35	306.85	4512.63
8/27/2011	4607	0.70	276.17	4605.63
8/27/2011	4701	0.70	74.38	4699.64
8/27/2011	4794	0.53	68.05	4792.62
8/28/2011	4888	0.62	75.43	4886.62
8/28/2011	4981	0.26	71.12	4979.61
8/28/2011	5075	0.35	32.19	5073.61
8/28/2011	5168	0.88	115.07	0.00
8/28/2011	5355	0.70	104.79	0.00
8/28/2011	5542	0.88	99.34	0.00
8/28/2011	5729	0.88	96.35	5727.55
8/28/2011	5822	0.26	115.51	5820.55
8/29/2011	6009	0.62	107.70	6007.54
8/29/2011	6195	0.88	143.55	6193.53
8/29/2011	6382	0.88	146.80	0.00
8/29/2011	6569	0.88	133.70	0.00
8/29/2011	6662	0.18	150.23	0.00
8/29/2011	6895	0.09	76.31	6847.48
8/29/2011	7036	0.35	119.55	7034.48
8/29/2011	7129	0.62	33.16	7127.47
8/30/2011	7315	0.79	67.52	7313.46

#	Date	Depth	Deviation	Direction	TVD
	8/30/2011	7409	0.53	70.16	7407.45
	8/30/2011	7502	0.70	315.90	7500.45
	8/30/2011	7689	0.35	351.41	0.00
	8/30/2011	7876	0.70	344.46	7874.43
	8/30/2011	7969	0.97	313.61	7967.43
	8/31/2011	8063	0.53	346.84	8061.42
	8/31/2011	8156	0.97	318.45	8154.41
	8/31/2011	8250	0.88	291.03	0.00
	8/31/2011	8343	1.93	314.32	0.00
	8/31/2011	8405	2.11	316.78	8403.33
	9/1/2011	8500	1.58	335.76	8498.28
	9/2/2011	8593	0.88	318.89	8591.26
	9/2/2011	8687	0.79	308.08	8685.25
	9/3/2011	8749	0.88	313.88	8742.24
	9/4/2011	8843	0.18	125.79	8841.24
	9/4/2011	8936	0.18	220.98	8934.24
	9/4/2011	9029	0.44	184.94	9027.24
	9/5/2011	9122	0.44	196.90	9120.24
	9/5/2011	9216	1.23	233.88	9214.23
	9/6/2011	9309	0.35	225.11	9307.22
	9/7/2011	9404	0.18	129.31	9402.00
	9/7/2011	9498	1.14	143.19	0.00
	9/8/2011	9591	0.44	73.23	9589.20
	9/8/2011	9684	0.62	38.96	9682.00
	9/8/2011	9778	0.09	305.97	9776.19
	9/9/2011	9871	0.09	199.71	9869.19
	9/10/2011	9965	0.44	206.12	9963.19
	9/10/2011	10058	0.44	201.64	10056.19
	9/11/2011	10143	0.70	223.00	10141.00
	9/11/2011	10236	0.88	235.57	10234.18
	9/12/2011	10392	0.70	267.47	10390.00
	9/13/2011	10502	0.70	0.00	0.00
	9/14/2011	10635	0.80	0.00	0.00
	9/15/2011	10803	0.70	0.00	0.00
	9/22/2011	8748	2.73	72.04	8746.23
	9/22/2011	8790	10.38	77.43	8787.93
	9/22/2011	8821	15.48	76.86	8818.13
	9/23/2011	8852	17.24	78.49	8847.88
	9/23/2011	8883	18.82	79.95	8877.35
	9/23/2011	8914	20.58	80.67	8906.00
	9/23/2011	8945	24.01	81.99	8935.22
	9/23/2011	8976	26.38	83.94	8963.27
	9/24/2011	9008	27.44	85.88	8991.80
	9/24/2011	9039	29.90	87.51	9019.00
	9/25/2011	9059	31.48	88.32	9036.20
	9/29/2011	9160	43.09	91.29	9116.42
	9/29/2011	9192	47.48	90.72	9138.93
	9/29/2011	9223	52.67	89.84	9158.82
	9/29/2011	9255	56.37	89.18	9177.39
	9/29/2011	9287	59.77	90.54	9194.31
	9/29/2011	9318	61.64	91.55	9209.47
	9/29/2011	9350	63.66	91.78	9224.09
	9/29/2011	9382	67.27	91.88	9237.38

# Date	Depth	Deviation	Direction	TVD
9/29/2011	9413	71.40	91.83	9248.40
9/30/2011	9445	74.13	91.42	9257.88
9/30/2011	9476	78.08	90.96	9265.32
9/30/2011	9508	80.37	91.60	9271.30
9/30/2011	9540	81.16	92.74	9276.44
10/2/2011	9596	85.86	92.42	9282.00
10/2/2011	9627	88.60	92.36	9284.00
10/2/2011	9659	88.99	92.48	9284.94
10/2/2011	9722	89.61	91.50	9285.60
10/2/2011	9754	89.72	91.74	9285.75
10/2/2011	9786	89.72	90.59	9285.94
10/3/2011	9817	89.66	90.44	9286.11
10/3/2011	9849	89.61	90.54	9286.32
10/3/2011	9881	89.89	90.52	9286.46
10/3/2011	9912	90.22	90.62	0.00
10/3/2011	9944	90.22	90.85	9286.30
10/3/2011	9975	89.78	90.03	9286.30
10/3/2011	10039	89.72	89.86	9286.63
10/3/2011	10071	89.50	89.82	9286.85
10/4/2011	10134	88.83	89.69	9287.89
10/4/2011	10166	89.44	88.81	9288.37
10/5/2011	10228	89.05	89.50	9289.08
10/6/2011	10260	89.16	89.30	9289.58
10/6/2011	10292	90.45	89.25	9289.69
10/6/2011	10323	90.67	89.32	9289.39
10/7/2011	10355	91.18	88.90	9288.87
10/7/2011	10387	92.29	89.08	9287.90
10/8/2011	10418	92.69	89.28	9286.56
10/8/2011	10450	91.46	90.18	9285.40
10/8/2011	10482	90.39	90.87	9284.89
10/9/2011	10513	90.73	90.98	9284.58
10/9/2011	10545	91.06	90.27	9284.08
10/9/2011	10577	91.29	89.53	9283.42
10/9/2011	10608	91.62	89.63	9282.64
10/10/2011	10639	92.91	89.66	9281.41
10/10/2011	10670	95.55	90.35	9279.72
10/11/2011	10702	95.26	90.51	9276.11
10/11/2011	10734	94.54	90.14	9273.38
10/11/2011	10765	94.26	90.42	9271.00
10/11/2011	10797	92.46	91.41	9269.12
10/11/2011	10829	92.97	90.62	9267.61
10/11/2011	10860	93.69	90.26	9265.81
10/12/2011	10892	93.81	89.43	9263.71
10/12/2011	11018	88.88	89.24	9260.11
10/14/2011	11112	91.46	88.38	9259.90
10/14/2011	11144	90.56	88.94	9259.34
10/14/2011	11178	89.50	88.60	9259.32
10/14/2011	11210	89.22	88.77	9259.68
10/14/2011	11273	89.44	89.42	9260.61
10/15/2011	11305	90.11	89.26	9260.73
10/15/2011	11368	90.00	89.34	9260.64
10/15/2011	11431	88.83	89.53	9261.23
10/16/2011	11463	88.54	89.49	9261.97

#	Date	Depth	Deviation	Direction	TVD
	10/16/2011	11495	89.10	89.22	9262.62
	10/16/2011	11526	89.72	89.16	9262.94
	10/17/2011	11556	89.94	89.44	9262.03
	10/17/2011	11588	90.84	88.77	9262.81
	10/17/2011	11620	91.46	89.21	9267.17
	10/17/2011	11651	91.12	89.81	9261.47
	10/17/2011	11683	91.12	89.47	9260.85
	10/18/2011	11715	90.39	89.35	9260.43
	10/18/2011	11746	90.84	89.37	9260.09
	10/18/2011	11778	91.29	89.52	9259.50
	10/18/2011	11810	91.96	89.73	9258.59
	10/18/2011	11841	91.51	89.96	9257.65
	10/18/2011	11873	89.83	90.61	9257.29
	10/18/2011	11904	87.09	91.55	9258.11
	10/19/2011	11936	86.30	91.53	9259.96
	10/19/2011	11968	87.03	90.80	9261.82
	10/20/2011	12000	87.65	90.04	9263.30
	10/20/2011	12032	88.04	89.94	9264.51
	10/20/2011	12063	88.38	89.97	9265.48
	10/20/2011	12127	89.22	88.16	9266.49
	10/20/2011	12158	88.99	87.25	9266.98
	10/21/2011	12190	86.31	86.63	9268.29
	10/21/2011	12221	84.22	86.10	9270.85
	10/21/2011	12253	84.74	86.47	9273.93
	10/21/2011	12285	86.03	86.55	9276.50
	10/21/2011	12316	87.03	86.14	92778.38
	10/21/2011	12348	86.81	86.81	9280.10
	10/21/2011	12379	87.37	87.14	9281.67
	10/22/2011	12411	88.21	87.50	9182.90
	10/22/2011	12443	88.55	87.71	9283.81
	10/23/2011	12474	88.55	88.00	9284.59
	10/23/2011	12506	88.82	88.18	9285.33
	10/23/2011	12537	88.21	88.34	9286.13
	10/23/2011	12569	87.87	88.57	9287.23
	10/23/2011	12601	88.27	88.98	9288.30
	10/23/2011	12632	89.27	88.66	9288.97
	10/24/2011	12696	90.62	89.20	9289.00
	10/24/2011	12726	90.84	89.16	9289.62

EOF



A Schlumberger Company

DIRECTIONAL SURVEY REPORT

HOBBS OCD

DEC 13 2011

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MACK ENERGY

CONDOR STATE #2

LEA COUNTY, NEW MEXICO

SUR; E-25-18s-34e, 2285/N & 330/W
BHL; H-25-18s-34e, 2231/N & 4068/W
API # 30-025-40217

PREPARED BY: STEVE BIBB

Pathfinder

6213 WCR 112
Midland, Texas 79706
Tel (432)687-1647
Fax (432)687-1544



DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) ERIC PAYNE
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 08-27-11 TO 10-24-11
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: LEA COUNTY, NM
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

MACK ENERGY
CONDOR STATE #2
LEA COUNTY, NM
RIG: SILVER OAK 7

9. SURVEY CERTIFIED FROM: 4234 TO 12726 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 3738.34 FEET ON A BEARING OF 89.17 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 12782 FEET, ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

A handwritten signature in black ink, appearing to read "Steve Bibb".

STEVE BIBB
M/LWD SERVICE COORDINATOR

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 08/26/2011
Date Completed: 10/24/2011

MACK ENERGY CORPORATION
CONDOR STATE #2
LEA COUNTY, NM
Rig:SILVER OAK #7
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers:ERIC PAYNE
ALLAN ABRAHAM
RAFAEL DONARUMMA

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.43.10.5815 N LON:103.31.14.9439 W
GRID Reference:NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 749892.1000 Y: 626461.4000
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.14° EAST TO GRID
Vertical Section Plane: 89.35
Survey Vert. Reference: 17.50' Kelly Bushing To Ground
Altitude:3976.00' Ground To MSL

Measured Depth	12782.00	(feet)
Inclination	90.84	(deg)
Azimuth	89.16	(deg)
True Vertical Depth	9287.80	(feet)
Vertical Section	3738.32	(feet)
Survey X cord	753630.05	(feet)
Survey Y cord	626515.45	(feet)
Survey Lat	32.71967517 N	(deg)
Survey Lon	103.50866363 W	(deg)
Rectangular Corr. N/S	54.05 N	(feet)
Rectangular Corr. E/W	3737.95 E	(feet)
Closure Distance	3738.34	(feet)
Direction of Closure	89.17	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

MACK ENERGY CORPORATION
CONDOR STATE #2
LEA COUNTY, NM
Rig:SILVER OAK #7
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers: ERIC PAYNE
ALLAN ABRAHAM
ALFONSO HABEYCH
JOHN OVERTON
RAFAEL DONARUMMA
Survey Calculations by RX5 V6.03E using Minimum Curvature

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.43.10.5815 N LON:103.31.14.9439 W
GRID Reference:NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 749892.1000 Y: 626461.4000
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.14 ° EAST TO GRID
Vertical Section Plane: 89.35
Survey Vert. Reference: 17.50' Kelly Bushing To Ground
Altitude:3976.00' Ground To MSL

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)
THE FOLLOWING ARE TELEDRIFT PROSHOT MWD SURVEYS.									
161.00	0.30	231.80	161.00	0.00	-0.33	0.26 S	0.33 W	0.42@ 232.05	0.00
343.00	0.70	104.80	343.00	182.00	0.36	0.84 S	0.37 E	0.91@ 156.16	0.50
522.00	0.20	122.80	521.99	179.00	1.67	1.29 S	1.69 E	2.12@ 127.26	0.29
687.00	0.70	120.80	686.98	165.00	2.77	1.96 S	2.80 E	3.41@ 124.98	0.30
865.00	0.80	100.80	864.97	178.00	4.92	2.75 S	4.95 E	5.66@ 119.02	0.16
1058.00	0.60	128.80	1057.96	193.00	7.02	3.63 S	7.06 E	7.94@ 117.22	0.20
1229.00	0.50	133.80	1228.95	171.00	8.25	4.71 S	8.30 E	9.54@ 119.58	0.06
1417.00	0.70	107.80	1416.94	188.00	9.92	5.63 S	9.98 E	11.46@ 119.41	0.18
1599.00	0.50	161.80	1598.93	182.00	11.21	6.72 S	11.29 E	13.14@ 120.77	0.31
1783.00	0.60	169.80	1782.92	184.00	11.62	8.43 S	11.71 E	14.43@ 125.76	0.07
1946.00	0.90	229.80	1945.91	163.00	10.77	10.10 S	10.89 E	14.85@ 132.86	0.49
2132.00	1.80	227.80	2131.85	186.00	7.46	13.01 S	7.61 E	15.07@ 149.68	0.48
2315.00	2.30	233.80	2314.74	183.00	2.32	17.10 S	2.51 E	17.29@ 171.64	0.30
2409.00	2.30	236.80	2408.66	94.00	-0.81	19.25 S	0.59 W	19.26@ 181.75	0.13
2595.00	1.90	230.80	2594.54	186.00	-6.36	23.24 S	6.10 W	24.03@ 194.70	0.24
2782.00	1.70	234.80	2781.44	187.00	-11.07	26.80 S	10.77 W	28.88@ 201.89	0.13
2973.00	0.80	230.80	2972.40	191.00	-14.45	29.28 S	14.12 W	32.50@ 205.74	0.47
3160.00	0.40	244.80	3159.39	187.00	-16.06	30.38 S	15.72 W	34.21@ 207.36	0.23
3345.00	0.10	346.80	3344.38	185.00	-16.69	30.50 S	16.34 W	34.60@ 208.18	0.23
3532.00	1.50	4.80	3531.36	187.00	-16.49	27.90 S	16.17 W	32.25@ 210.10	0.75
3719.00	2.20	18.80	3718.26	187.00	-15.06	22.06 S	14.81 W	26.57@ 213.87	0.44
3901.00	2.50	9.80	3900.11	182.00	-13.18	14.85 S	13.01 W	19.74@ 221.23	0.26
3998.00	2.50	3.80	3997.02	97.00	-12.63	10.65 S	12.51 W	16.43@ 229.59	0.27
4092.00	2.80	357.80	4090.92	94.00	-12.53	6.31 S	12.46 W	13.97@ 243.14	0.43
TIED INTO TELEDRIFT PROSHOT MWD SURVEY @ 4185'MD.									
4185.00	3.00	2.80	4183.80	0.00	-12.45	1.61 S	12.43 W	12.53@ 262.62	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.									
4234.00	2.90	358.88	4232.73	49.00	-12.38	0.91 N	12.39 W	12.42@ 274.20	0.46

PathFinder Energy Services, Inc.

Survey Report

MACK ENERGY CORPORATION
CONDOR STATE #2
LEA COUNTY, NM
RIG:SILVER OAK #7

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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)
4327.00	1.85	327.85	4325.66	93.00	-13.18	4.53 N 13.24 W	13.99@ 288.91	1.75
4421.00	0.44	306.32	4419.64	94.00	-14.27	6.03 N 14.33 W	15.55@ 292.82	1.54
4514.00	0.35	306.85	4512.63	93.00	-14.78	6.41 N 14.85 W	16.18@ 293.36	0.10
4607.00	0.70	276.17	4605.63	93.00	-15.57	6.65 N 15.64 W	16.99@ 293.02	0.47
4701.00	0.70	74.38	4699.63	94.00	-15.58	6.86 N 15.66 W	17.10@ 293.66	1.46
4794.00	0.53	68.05	4792.62	93.00	-14.63	7.18 N 14.71 W	16.37@ 296.00	0.20
4888.00	0.62	75.43	4886.62	94.00	-13.73	7.47 N 13.82 W	15.71@ 298.38	0.12
4981.00	0.26	71.12	4979.61	93.00	-13.04	7.66 N 13.13 W	15.20@ 300.26	0.39
5075.00	0.35	32.19	5073.61	94.00	-12.69	7.97 N 12.78 W	15.06@ 301.96	0.23
5168.00	0.88	115.07	5166.61	93.00	-11.89	7.91 N 11.98 W	14.35@ 303.44	0.97
5355.00	0.70	104.79	5353.59	187.00	-9.49	7.01 N 9.57 W	11.87@ 306.21	0.12
5542.00	0.88	99.34	5540.57	187.00	-6.98	6.49 N 7.05 W	9.58@ 312.60	0.10
5729.00	0.88	96.35	5727.55	187.00	-4.14	6.09 N 4.21 W	7.41@ 325.37	0.02
5822.00	0.26	115.51	5820.55	93.00	-3.24	5.92 N 3.31 W	6.78@ 330.82	0.69
6009.00	0.62	107.07	6007.54	187.00	-1.90	5.44 N 1.96 W	5.79@ 340.22	0.20
6195.00	0.88	143.55	6193.53	186.00	-0.10	4.00 N 0.15 W	4.00@ 357.90	0.28
6382.00	0.88	146.80	6380.50	187.00	1.51	1.64 N 1.49 E	2.22@ 42.25	0.03
6569.00	0.88	133.70	6567.48	187.00	3.31	0.55 S 3.32 E	3.36@ 99.43	0.11
6662.00	0.18	150.23	6660.48	93.00	3.89	1.17 S 3.91 E	4.08@ 106.69	0.76
6849.00	0.09	76.31	6847.48	187.00	4.18	1.39 S 4.19 E	4.42@ 108.35	0.09
7036.00	0.35	119.55	7034.47	187.00	4.82	1.64 S 4.83 E	5.10@ 108.72	0.16
7129.00	0.62	33.16	7127.47	93.00	5.34	1.36 S 5.36 E	5.53@ 104.22	0.74
7315.00	0.79	67.52	7313.46	186.00	7.09	0.02 S 7.09 E	7.09@ 90.19	0.24
7409.00	0.53	70.16	7407.45	94.00	8.10	0.37 N 8.10 E	8.11@ 87.38	0.28
7502.00	0.70	315.90	7500.45	93.00	8.12	0.93 N 8.11 E	8.16@ 83.49	1.12
7689.00	0.35	351.41	7687.44	187.00	7.25	2.31 N 7.23 E	7.59@ 72.28	0.25
7876.00	0.70	344.46	7874.43	187.00	6.88	3.98 N 6.84 E	7.91@ 59.82	0.19
7969.00	0.97	313.61	7967.43	93.00	6.17	5.07 N 6.11 E	7.94@ 50.36	0.55

PathFinder Energy Services, Inc.

Survey Report

MACK ENERGY CORPORATION
CONDOR STATE #2
LEA COUNTY, NM
RIG:SILVER OAK #7

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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)
8063.00	0.53	346.84	8061.42	94.00	5.51	6.04 N 5.44 E	8.13@ 42.02	0.64
8156.00	0.97	318.45	8154.41	93.00	4.90	7.05 N 4.82 E	8.54@ 34.37	0.61
8250.00	0.88	291.03	8248.40	94.00	3.71	7.90 N 3.62 E	8.69@ 24.61	0.48
8343.00	1.93	314.32	8341.37	93.00	1.94	9.25 N 1.83 E	9.43@ 11.20	1.26
8405.00	2.11	316.78	8403.33	62.00	0.43	10.81 N 0.30 E	10.82@ 1.60	0.32
8500.00	1.58	335.76	8498.28	95.00	-1.28	13.28 N 1.43 W	13.36@ 353.84	0.84
8593.00	0.88	318.89	8591.26	93.00	-2.26	14.99 N 2.43 W	15.18@ 350.80	0.84
8687.00	0.79	308.08	8685.25	94.00	-3.23	15.93 N 3.41 W	16.29@ 347.91	0.19
8696.00	0.79	332.07	8694.25	9.00	-3.31	16.02 N 3.49 W	16.40@ 347.71	3.65
8748.00	2.73	72.04	8746.23	52.00	-2.29	16.72 N 2.48 W	16.91@ 351.56	5.71
8768.00	6.24	76.96	8766.16	20.00	-0.77	17.12 N 0.97 W	17.14@ 356.76	17.64
8790.00	10.38	77.43	8787.93	22.00	2.33	17.82 N 2.13 E	17.94@ 6.82	18.82
8821.00	15.48	76.86	8818.13	31.00	9.11	19.37 N 8.89 E	21.31@ 24.66	16.46
8852.00	17.24	78.49	8847.88	31.00	17.66	21.22 N 17.42 E	27.46@ 39.38	5.87
8883.00	18.82	79.95	8877.35	31.00	27.11	23.01 N 26.85 E	35.36@ 49.40	5.30
8914.00	20.58	80.67	8906.54	31.00	37.43	24.77 N 37.15 E	44.65@ 56.31	5.73
8945.00	24.01	81.99	8935.22	31.00	49.07	26.53 N 48.77 E	55.52@ 61.45	11.18
8976.00	26.38	83.94	8963.27	31.00	62.18	28.14 N 61.87 E	67.97@ 65.54	8.10
9008.00	27.44	85.88	8991.80	32.00	76.62	29.42 N 76.29 E	81.77@ 68.91	4.30
9039.00	29.90	87.51	9019.00	31.00	91.48	30.27 N 91.14 E	96.03@ 71.63	8.33
9059.00	31.48	88.32	9036.20	20.00	101.68	30.64 N 101.34 E	105.87@ 73.18	8.17
9160.00	43.09	91.29	9116.43	101.00	162.74	30.63 N 162.40 E	165.27@ 79.32	11.63
9192.00	47.48	90.72	9138.93	32.00	185.47	30.24 N 185.13 E	187.59@ 80.72	13.78
9223.00	52.67	89.84	9158.82	31.00	209.23	30.13 N 208.90 E	211.06@ 81.79	16.88
9255.00	56.37	89.18	9177.39	32.00	235.28	30.36 N 234.95 E	236.90@ 82.64	11.68
9287.00	59.79	90.54	9194.31	32.00	262.44	30.42 N 262.11 E	263.87@ 83.38	11.28
9318.00	61.64	91.55	9209.47	31.00	289.46	29.92 N 289.14 E	290.68@ 84.09	6.61
9350.00	63.66	91.78	9224.17	32.00	317.86	29.09 N 317.55 E	318.88@ 84.77	6.34

PathFinder Energy Services, Inc.

Survey Report

MACK ENERGY CORPORATION
CONDOR STATE #2
LEA COUNTY, NM
RIG:SILVER OAK #7

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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)
9382.00	67.27	91.88	9237.46	32.00	346.94	28.16 N 346.64 E	347.78@ 85.35	11.29
9413.00	71.40	91.83	9248.40	31.00	375.91	27.23 N 375.62 E	376.61@ 85.85	13.32
9445.00	74.13	91.42	9257.88	32.00	406.44	26.36 N 406.17 E	407.03@ 86.29	8.62
9476.00	78.08	90.96	9265.32	31.00	436.52	25.74 N 436.25 E	437.01@ 86.62	12.82
9508.00	80.37	91.60	9271.30	32.00	467.93	25.03 N 467.68 E	468.35@ 86.94	7.42
9540.00	81.16	92.74	9276.44	32.00	499.48	23.84 N 499.24 E	499.81@ 87.27	4.30
9596.00	85.86	92.42	9282.77	56.00	555.02	21.33 N 554.81 E	555.22@ 87.80	8.41
9627.00	88.60	92.36	9284.27	31.00	585.93	20.04 N 585.74 E	586.09@ 88.04	8.84
9659.00	88.99	92.48	9284.94	32.00	617.88	18.69 N 617.71 E	617.99@ 88.27	1.27
9691.00	89.50	91.80	9285.36	32.00	649.84	17.50 N 649.68 E	649.92@ 88.46	2.66
9722.00	89.61	91.50	9285.60	31.00	680.81	16.60 N 680.67 E	680.87@ 88.60	1.03
9754.00	89.72	91.74	9285.79	32.00	712.79	15.70 N 712.65 E	712.83@ 88.74	0.82
9786.00	89.72	90.59	9285.94	32.00	744.77	15.05 N 744.65 E	744.80@ 88.84	3.59
9817.00	89.66	90.44	9286.11	31.00	775.76	14.77 N 775.65 E	775.79@ 88.91	0.52
9849.00	89.61	90.54	9286.32	32.00	807.76	14.50 N 807.64 E	807.77@ 88.97	0.35
9881.00	89.89	90.52	9286.46	32.00	839.75	14.20 N 839.64 E	839.76@ 89.03	0.88
9912.00	90.22	90.62	9286.43	31.00	870.74	13.89 N 870.64 E	870.75@ 89.09	1.11
9944.00	90.22	90.85	9286.30	32.00	902.73	13.48 N 902.64 E	902.74@ 89.14	0.72
9975.00	89.78	90.03	9286.30	31.00	933.73	13.24 N 933.64 E	933.73@ 89.19	3.00
10007.00	89.66	89.52	9286.46	32.00	965.72	13.37 N 965.64 E	965.73@ 89.21	1.64
10039.00	89.72	89.86	9286.63	32.00	997.72	13.54 N 997.63 E	997.73@ 89.22	1.08
10071.00	89.50	89.82	9286.85	32.00	1029.72	13.63 N 1029.63 E	1029.72@ 89.24	0.70
10103.00	88.94	89.52	9287.29	32.00	1061.72	13.82 N 1061.63 E	1061.72@ 89.25	1.99
10134.00	88.83	89.69	9287.89	31.00	1092.71	14.03 N 1092.62 E	1092.71@ 89.26	0.65
10166.00	89.44	88.81	9288.37	32.00	1124.71	14.45 N 1124.62 E	1124.71@ 89.26	3.35
10197.00	89.44	88.61	9288.67	31.00	1155.70	15.15 N 1155.61 E	1155.71@ 89.25	0.64
10228.00	89.05	89.50	9289.08	31.00	1186.70	15.66 N 1186.60 E	1186.70@ 89.24	3.13
10260.00	89.16	89.30	9289.58	32.00	1218.70	15.99 N 1218.59 E	1218.70@ 89.25	0.71

PathFinder Energy Services, Inc.

Survey Report

MACK ENERGY CORPORATION
CONDOR STATE #2
LEA COUNTY, NM
RIG:SILVER OAK #7

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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)
10292.00	90.45	89.25	9289.69	32.00	1250.70	16.40 N 1250.59 E	1250.70@ 89.25	4.03
10323.00	90.67	89.32	9289.39	31.00	1281.69	16.79 N 1281.59 E	1281.70@ 89.25	0.74
10355.00	91.18	88.90	9288.87	32.00	1313.69	17.28 N 1313.58 E	1313.69@ 89.25	2.06
10387.00	92.29	89.08	9287.90	32.00	1345.67	17.85 N 1345.56 E	1345.68@ 89.24	3.51
10418.00	92.69	89.28	9286.56	31.00	1376.64	18.29 N 1376.53 E	1376.65@ 89.24	1.44
10450.00	91.46	90.18	9285.40	32.00	1408.62	18.44 N 1408.50 E	1408.62@ 89.25	4.76
10482.00	90.39	90.87	9284.88	32.00	1440.61	18.15 N 1440.50 E	1440.61@ 89.28	3.98
10513.00	90.73	90.98	9284.58	31.00	1471.60	17.65 N 1471.49 E	1471.60@ 89.31	1.15
10545.00	91.06	90.27	9284.08	32.00	1503.59	17.30 N 1503.49 E	1503.59@ 89.34	2.45
10577.00	91.29	89.53	9283.42	32.00	1535.58	17.35 N 1535.48 E	1535.58@ 89.35	2.42
10608.00	91.62	89.63	9282.64	31.00	1566.57	17.58 N 1566.47 E	1566.57@ 89.36	1.11
10639.00	92.91	89.66	9281.41	31.00	1597.54	17.77 N 1597.44 E	1597.54@ 89.36	4.16
10670.00	95.55	90.35	9279.12	31.00	1628.45	17.77 N 1628.36 E	1628.45@ 89.37	8.80
10702.00	95.26	90.51	9276.11	32.00	1660.30	17.53 N 1660.21 E	1660.30@ 89.40	1.03
10734.00	94.54	90.14	9273.38	32.00	1692.18	17.35 N 1692.09 E	1692.18@ 89.41	2.53
10765.00	94.26	90.42	9271.00	31.00	1723.09	17.20 N 1723.00 E	1723.09@ 89.43	1.27
10797.00	92.46	91.41	9269.12	32.00	1755.02	16.69 N 1754.94 E	1755.02@ 89.46	6.42
10829.00	92.97	90.62	9267.61	32.00	1786.97	16.12 N 1786.90 E	1786.97@ 89.48	2.94
10860.00	93.69	90.26	9265.81	31.00	1817.91	15.88 N 1817.85 E	1817.92@ 89.50	2.60
10892.00	93.81	89.43	9263.71	32.00	1849.84	15.97 N 1849.78 E	1849.85@ 89.51	2.61
10923.00	93.19	88.79	9261.82	31.00	1880.78	16.45 N 1880.72 E	1880.79@ 89.50	2.87
11018.00	88.88	89.24	9260.11	95.00	1975.74	18.08 N 1975.66 E	1975.75@ 89.48	4.56
11066.00	90.11	88.79	9260.53	48.00	2023.74	18.91 N 2023.65 E	2023.74@ 89.46	2.73
11112.00	91.45	88.38	9259.90	46.00	2069.73	20.04 N 2069.63 E	2069.73@ 89.45	3.05
11144.00	90.56	88.94	9259.34	32.00	2101.72	20.79 N 2101.62 E	2101.72@ 89.43	3.29
11178.00	89.50	88.60	9259.32	34.00	2135.72	21.52 N 2135.61 E	2135.72@ 89.42	3.27
11210.00	89.22	88.77	9259.68	32.00	2167.71	22.26 N 2167.60 E	2167.72@ 89.41	1.02
11242.00	88.99	88.93	9260.18	32.00	2199.71	22.90 N 2199.59 E	2199.71@ 89.40	0.87

PathFinder Energy Services, Inc.

Survey Report

MACK ENERGY CORPORATION
CONDOR STATE #2
LEA COUNTY, NM
RIG:SILVER OAK #7

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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)
11273.00	89.44	89.42	9260.61	31.00	2230.71	23.35 N 2230.58 E	2230.71@ 89.40	2.15
11305.00	90.11	89.26	9260.73	32.00	2262.71	23.71 N 2262.58 E	2262.71@ 89.40	2.15
11337.00	90.11	89.54	9260.67	32.00	2294.71	24.05 N 2294.58 E	2294.71@ 89.40	0.87
11368.00	90.00	89.34	9260.64	31.00	2325.71	24.35 N 2325.58 E	2325.71@ 89.40	0.74
11400.00	89.50	89.55	9260.78	32.00	2357.70	24.66 N 2357.58 E	2357.71@ 89.40	1.69
11431.00	88.83	89.58	9261.23	31.00	2388.70	24.90 N 2388.57 E	2388.70@ 89.40	2.16
11463.00	88.54	89.49	9261.97	32.00	2420.69	25.16 N 2420.56 E	2420.69@ 89.40	0.95
11495.00	89.10	89.22	9262.62	32.00	2452.69	25.52 N 2452.55 E	2452.69@ 89.40	1.94
11526.00	89.72	89.16	9262.94	31.00	2483.68	25.96 N 2483.55 E	2483.68@ 89.40	2.01
11556.00	89.94	89.44	9263.03	30.00	2513.68	26.32 N 2513.55 E	2513.68@ 89.40	1.19
11588.00	90.84	88.77	9262.81	32.00	2545.68	26.82 N 2545.54 E	2545.68@ 89.40	3.51
11620.00	91.46	89.21	9262.17	32.00	2577.67	27.39 N 2577.53 E	2577.67@ 89.39	2.38
11651.00	91.12	89.81	9261.47	31.00	2608.67	27.65 N 2608.52 E	2608.67@ 89.39	2.22
11683.00	91.12	89.47	9260.85	32.00	2640.66	27.85 N 2640.51 E	2640.66@ 89.40	1.06
11715.00	90.39	89.35	9260.43	32.00	2672.66	28.18 N 2672.51 E	2672.66@ 89.40	2.31
11746.00	90.84	89.37	9260.09	31.00	2703.65	28.53 N 2703.50 E	2703.66@ 89.40	1.45
11778.00	91.29	89.52	9259.50	32.00	2735.65	28.84 N 2735.50 E	2735.65@ 89.40	1.48
11810.00	91.96	89.73	9258.59	32.00	2767.64	29.05 N 2767.48 E	2767.64@ 89.40	2.19
11841.00	91.51	89.96	9257.65	31.00	2798.62	29.13 N 2798.47 E	2798.62@ 89.40	1.63
11873.00	89.83	90.61	9257.28	32.00	2830.61	28.97 N 2830.47 E	2830.61@ 89.41	5.63
11904.00	87.09	91.55	9258.11	31.00	2861.58	28.39 N 2861.45 E	2861.59@ 89.43	9.34
11936.00	86.30	91.53	9259.96	32.00	2893.51	27.53 N 2893.38 E	2893.51@ 89.45	2.47
11968.00	87.03	90.80	9261.82	32.00	2925.44	26.88 N 2925.32 E	2925.44@ 89.47	3.22
12000.00	87.65	90.04	9263.30	32.00	2957.40	26.65 N 2957.28 E	2957.40@ 89.48	3.06
12032.00	88.04	89.94	9264.51	32.00	2989.37	26.65 N 2989.26 E	2989.38@ 89.49	1.26
12063.00	88.38	88.97	9265.48	31.00	3020.36	26.95 N 3020.24 E	3020.37@ 89.49	3.31
12095.00	89.38	88.58	9266.10	32.00	3052.35	27.63 N 3052.23 E	3052.36@ 89.48	3.35
12127.00	89.22	88.16	9266.49	32.00	3084.34	28.54 N 3084.22 E	3084.35@ 89.47	1.40

PathFinder Energy Services, Inc.

Survey Report

MACK ENERGY CORPORATION
CONDOR STATE #2
LEA COUNTY, NM
RIG:SILVER OAK #7

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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)
12158.00	88.99	87.25	9266.98	31.00	3115.32	29.78 N 3115.19 E	3115.33@ 89.45	3.03
12190.00	86.31	86.63	9268.29	32.00	3147.27	31.49 N 3147.11 E	3147.27@ 89.43	8.60
12221.00	84.22	86.10	9270.85	31.00	3178.12	33.45 N 3177.94 E	3178.12@ 89.40	6.95
12253.00	84.74	86.47	9273.93	32.00	3209.92	35.51 N 3209.73 E	3209.92@ 89.37	1.99
12285.00	86.03	86.55	9276.50	32.00	3241.78	37.45 N 3241.56 E	3241.78@ 89.34	4.04
12316.00	87.03	86.41	9278.38	31.00	3272.68	39.35 N 3272.45 E	3272.68@ 89.31	3.26
12348.00	86.81	86.08	9280.10	32.00	3304.59	41.44 N 3304.33 E	3304.59@ 89.28	1.24
12379.00	87.37	87.14	9281.67	31.00	3335.51	43.27 N 3335.24 E	3335.52@ 89.26	3.86
12411.00	88.21	87.50	9282.90	32.00	3367.47	44.77 N 3367.18 E	3367.48@ 89.24	2.86
12443.00	88.55	87.71	9283.81	32.00	3399.44	46.11 N 3399.14 E	3399.45@ 89.22	1.25
12474.00	88.55	88.00	9284.59	31.00	3430.42	47.27 N 3430.11 E	3430.43@ 89.21	0.94
12506.00	88.82	88.18	9285.33	32.00	3462.40	48.33 N 3462.08 E	3462.42@ 89.20	1.01
12537.00	88.21	88.34	9286.13	31.00	3493.39	49.27 N 3493.05 E	3493.40@ 89.19	2.03
12569.00	87.87	88.57	9287.23	32.00	3525.37	50.14 N 3525.02 E	3525.38@ 89.19	1.28
12601.00	88.27	88.98	9288.30	32.00	3557.35	50.82 N 3557.00 E	3557.36@ 89.18	1.79
12632.00	89.27	88.66	9288.97	31.00	3588.34	51.46 N 3587.98 E	3588.35@ 89.18	3.39
12664.00	90.00	88.67	9289.17	32.00	3620.33	52.20 N 3619.97 E	3620.35@ 89.17	2.28
12696.00	90.62	89.20	9289.00	32.00	3652.33	52.80 N 3651.97 E	3652.35@ 89.17	2.55
12726.00	90.84	89.16	9288.62	30.00	3682.33	53.23 N 3681.96 E	3682.35@ 89.17	0.75
STRAIGHT LINE PROJECTION TO BIT @ 12782'MD.								
12782.00	90.84	89.16	9287.80	56.00	3738.32	54.05 N 3737.95 E	3738.34@ 89.17	0.00

** The survey data at tie-in point was furnished by a recognized survey company and entered as submitted. Survey stations above the tie-in point represent recalculated data by PathFinder Energy Services, Inc. and may reflect minor changes due to rounding differences between survey programs. Only survey stations taken by qualified PathFinder personnel are subject to certification.



TIE-IN SURVEY INFORMATION SHEET

CLIENT INFORMATION

CLIENT:	Mack Energy		
LEASE / WELL No.:	Condor State	#2	
WELL LOCATION:	Lea County		
COUNTY / STATE / COUNTRY:	Lea	NM	USA
RIG:	Silver Oak #7		
API WELL No:	30-025-40217		
JOB No:	700003511-WT-WT		
P.O. / AFE No.			
DIRECTIONAL COMPANY:	Pathfinder		

WELL SITE INFORMATION

TOTAL MAGNETIC CORRECTION (TMC):			
On Wall Plat:	7.14	LWD Calculated:	7.14
		Agreed Upon:	7.14
X =	749892.100000	Feet	Y = 626461.400000
			Feet
SITE LATITUDE:	32° 43' 10.5815" N	SITE LONGITUDE:	103° 31' 14.9439" W
GRID SYSTEM:	TRUE ☐ UTM ☒ LAMBERT ☐ ZONE:		
PROPOSED DRIFT DIRECTION:	89.35		
KELLY BUSHING ELEVATION:	17.5 Feet		
ALTITUDE:	3976	Feet	WATER DEPTH:
			Feet

TIE-IN SURVEY

MEASURED DEPTH:	4185		
DRIFT ANGLE:	3.00		
DRIFT DIRECTION:	2.80		
TRUE VERTICAL DEPTH:	4183.80		
VERTICAL SECTION:	-12.45		
RECTANGULAR COORDINATE (N / S) :	-1.61		
RECTANGULAR COORDINATE (E / W) :	-12.43		
CLOSURE DISTANCE / DIRECTION:	12.53	262.61	
SURVEY CALCULATION METHOD:	AA ☐	MC ☒	RC ☐ BT ☐
SOURCE OF TIE-IN DATA (COMPANY):	Teledrift		
COPY OF TIE-IN SURVEY REPORT	☒ YES ☐ NO		

WELL PLAN

KICKOFF DEPTH:	8722.04	TOTAL DEPTH:	13657.68
KICKOFF ANGLE:	0	MAX ANGLE:	90.07

PES Engineers: Eric Payne
Allan Abraham

**Signature of both field engineers required if applicable

Directional Driller: Monnie Prater / Eric Payne

DATE: 26-Aug-2011



SURVEY REPORT

Page 1 of 2

PROSHOT MWD BY TELEDRIIFT
P.O. BOX 94395
OKLAHOMA CITY, OK 73143-4395
TEL: 405-631-4882
FAX: 405-631-8344
WWW.TELEDRIIFT.COM

ProView Version 6.10

Report created using job file: Mack

Condor State # 2-18AUG11

Report saved on 27 Aug 2011 04:33

Depth in feet

WELL NAME Condor State # 2

NORTH CORRECTION 7.8°

JOB ID Mack Condor State # 2

COMPANY Mack Energy

CONTRACTOR Silver Oak # 7

START DATE 18 AUG 11

API #

LOCATION Condor State # 2

All azimuths are referenced to true north
and corrected with the north correction above.

SURVEY #	SURVEY DEPTH	DATE	TIME	INCLINATION	AZIMUTH
Tie-in	0.0	18-Aug-11	15:23	00.0	0.0
0006	161.0	19-Aug-11	21:59	00.3	231.8
0011	343.0	20-Aug-11	01:26	00.7	104.8
0017	522.0	20-Aug-11	04:26	00.2	122.8
0019	687.0	20-Aug-11	09:37	00.7	120.8
0024	865.0	20-Aug-11	14:35	00.8	100.8
0032	1058.0	20-Aug-11	19:23	00.6	128.8
0037	1229.0	21-Aug-11	00:18	00.5	133.8
0039	1417.0	21-Aug-11	07:11	00.7	107.8
0046	1599.0	22-Aug-11	01:52	00.5	161.8
0052	1783.0	22-Aug-11	14:32	00.6	169.8
0061	1946.0	24-Aug-11	12:03	00.9	229.8
0067	2132.0	24-Aug-11	13:57	01.8	227.8
0073	2315.0	24-Aug-11	16:59	02.3	233.8
0076	2409.0	24-Aug-11	18:47	02.3	236.8
0082	2595.0	24-Aug-11	22:47	01.9	230.8
0089	2782.0	25-Aug-11	02:42	01.7	234.8
0096	2973.0	25-Aug-11	06:14	00.8	230.8
0102	3160.0	25-Aug-11	09:59	00.4	244.8
0108	3345.0	25-Aug-11	13:00	00.1	346.8
0113	3532.0	25-Aug-11	16:02	01.5	4.8
0119	3719.0	25-Aug-11	21:19	02.2	18.8

9525 Pole Rd, Oklahoma City, Oklahoma 73143.

Tel (405) 631-4882 Fax (405) 631-8344

www.teledrift.com



SURVEY REPORT

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SURVEY #	SURVEY DEPTH	DATE	TIME	INCLINATION	AZIMUTH
0125	3901.0	26-Aug-11	03:56	02.5	9.8
0128	3998.0	26-Aug-11	08:41	02.5	3.8
0131	4092.0	26-Aug-11	12:47	02.8	357.8
0135	4185.0	26-Aug-11	20:46	03.0	2.8



A Schlumberger Company

PathFinder Energy Services, Inc. Magnetic & Grid Calculations

MACK ENERGY
CONDOR STATE #2
LEA COUNTY, NEW MEXICO
Rig:SILVER OAK 7

Fri Aug 26 13:05:41 2011

Coordinates

Latitude: 32.719606 N (32 deg. 43 min. 10.5815 sec.)
Longitude: 103.520818 W (-103 deg. 31 min. 14.9439 sec.)
Elevation: 3993.50 feet.
Calculation Date: Aug/26/2011

Magnetic Calculations

Model: IGRF2010
Dip Angle: 60.6497 degrees
Total Magnetic Field: 0.48897 gauss
Magnetic Declination: 7.574212 degrees
Horizontal Intensity: 0.239668 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.574212 Degr

Transverse Mercator Grid Calculations NAD27

Grid System: Transverse Mercator: new mexico east
Ellipsoid: Clarke 1866
X: 749892.1000 feet
Y: 626461.4000 feet
True to Grid: (convergence) -0.439209 degrees
Magnetic to Grid: 7.135003 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.135003 Degr.

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

MACK ENERGY
CONDOR STATE #2
AIRSTRIPE; BONE SPRING

FIELD CALCULATIONS

Sat Aug 27 04:01:42 2011

Coordinates

Latitude: 32.719606 N (32 deg. 43 min. 10.5815 sec.)
Longitude: 103.520818 W (-103 deg. 31 min. 14.9439 sec.)
Elevation: 3993.50 feet.
Calculation Date: Aug/26/2011

Magnetic Calculations

Model: IGRF2010
Dip Angle: 60.6497 degrees
Total Magnetic Field: 0.48897 gauss
Magnetic Declination: 7.574212 degrees
Horizontal Intensity: 0.239668 gauss

To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.574212 Degr

Transverse Mercator Grid Calculations NAD27

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