

Results of Directional Survey

API number:	30-025-40755		
OGRID:		Operator:	MEWBOURNE OIL CO
		Property:	SALADO DRAW 9 AP FEDERAL COM # 1H

surface	ULSTR:	A	09	T 26S	R 33E
				310 FNL	380 FEL

BH Loc	ULSTR:	P	09	T 26S	R 33E
14270	MD	9931.4	TVD	338 FSL	364 FEL
				4942 FNL	

Top Perf/OH	ULSTR:	A	09	T 26S	R 33E
10257	MD	9868.0	TVD	932 FNL	392 FEL

Bot Perf/OH	ULSTR:	P	09	T 26S	R 33E
14220	MD	9931.4	TVD	388 FSL	365 FEL
				4892 FNL	

	MD	N/S	E/W	VD
	10248	-613.20	-12.40	9867.8
TOP PERFS/OH	10257	-622.17	-12.18	9867.97
	10280	-645.10	-11.60	9868.40
	14220	-4582.20	15.00	9931.40
BOT PERFS/OH	14220	-4582.20	15.00	9931.40
	14270	-4632.20	16.20	9931.40

NEXT TO LAST	14220	-4582.20	15.00	9931.40
LAST READING	14270	-4632.20	16.20	9931.40
TD	14270	-4632.20	16.20	9931.40

Surface Location	310	FN	380	FE
Projected BHL	4942	FN	364	FE
Location of				
Top Perfs/OH	932	FN	392	FE
Bottom Perfs/OH	4892	FN	365	FE

SUMMARY of Subsurface Locations

Surface Location	A-09-26S-33E	310	FN	380	FE	Vert. Depth
Top Perfs/OH	A-09-26S-33E	932	FN	392	FE	9867.97
Bottom Perfs/OH	P-09-26S-33E	4892	FN	365	FE	9931.40
Projected TD	P-09-26S-33E	4942	FN	364	FE	9931.40

MAR 07 2013

OPERATOR
WELL/LEASE
COUNTY

MEWBOURNE OIL COMPANY
SALADO DRAW 9 AP FED COM 1H
LEA

HOBBS OCD

041-0102

JAN 22 2013

STATE OF NEW MEXICO
DEVIATION REPORT

RECEIVED

376	0.96
708	1.71
1,400	1.03
1,842	0.17
2,284	0.68
2,725	2.07
2,914	2.59
3,104	4.09
3,230	4.77
3,324	4.19
3,420	3.63
3,513	3.16
3,639	2.90
3,765	3.55
3,863	3.85
3,954	3.83
4,049	4.20
4,143	3.66
4,238	2.86
4,333	2.25
4,398	1.50
4,493	1.09
4,815	2.29
5,076	0.97
5,508	0.68
5,950	0.43
6,391	0.57
6,834	0.26
7,277	0.31
7,570	0.59
7,946	0.48
8,419	1.18

RECEIVED
JAN 16 2013
NMOCD ARTESIA

SUR: A-9-26S-33E, 310/N & 380/E
BHL: P-9-26S-33E, 4942/N & 364/E
API # 30-025-40755

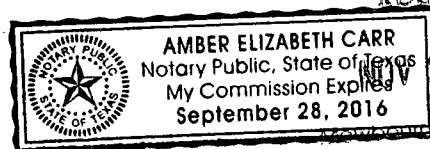
STATE OF TEXAS

BY: Steve Moore

COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me on 11/19/12, by
Steve Moore on behalf of Patterson-UTI Drilling Company LLC.

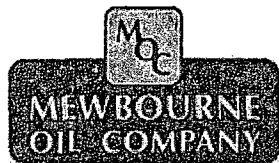
Amber Elizabeth Carr
Notary Public for Midland County, Texas
My Commission Expires:



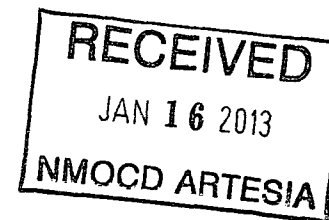
Received

NOV 18 2012

Oil Company
Hobbs



Company: Mewbourne Oil Company
Lease/Well: Salado Draw 9 AP Federal Com / No. 001H
Location: 30 miles W of Jal, New Mexico
Rig Name: Patterson 41
State/County: New Mexico / Lea
Latitude: 32.06, Longitude: -103.57
GRID North is 0.41 Degrees East of True North
VS-Azi: 0.00 Degrees



HOBBS OCD

JAN 22 2013

RECEIVED

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: gyro survey.ut
Minimum Curvature Method
Report Date/Time: 11/20/2012 / 08:36

Vaughn Energy Services
Midland, Texas
432-563-5444
Surveyor: Tim Dillon

Salado Draw 9 AP Federal Com No. 001H / API 30-025-40755

SUR: A-9-26S-33E, 310/N & 380/E
BHL: P-9-26S-33E, 4942/N & 364/E
API # 30-025-40755

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.43	149.93	100.00	-0.33	0.19	-0.33	0.38	149.93	0.43
200.00	0.87	159.86	199.99	-1.37	0.64	-1.37	1.51	154.89	0.45
300.00	0.90	163.26	299.98	-2.83	1.13	-2.83	3.05	158.28	0.06
400.00	0.94	164.67	399.97	-4.38	1.57	-4.38	4.66	160.25	0.04
500.00	1.27	158.22	499.95	-6.20	2.20	-6.20	6.58	160.46	0.35
600.00	1.60	151.78	599.92	-8.46	3.27	-8.46	9.07	158.86	0.37
700.00	1.65	143.44	699.88	-10.85	4.79	-10.85	11.86	156.17	0.24
800.00	1.70	139.09	799.83	-13.13	6.62	-13.13	14.70	153.24	0.14
900.00	1.71	125.17	899.79	-15.11	8.81	-15.11	17.49	149.75	0.41
1000.00	1.71	113.26	999.75	-16.55	11.40	-16.55	20.10	145.45	0.35
1100.00	1.42	108.87	1099.71	-17.54	13.94	-17.54	22.41	141.52	0.32
1200.00	1.12	104.48	1199.68	-18.19	16.06	-18.19	24.26	138.55	0.31
1300.00	0.87	100.40	1299.67	-18.57	17.75	-18.57	25.69	136.29	0.27
1400.00	0.61	111.32	1399.66	-18.90	18.99	-18.90	26.79	134.86	0.29
1500.00	0.46	127.70	1499.66	-19.34	19.80	-19.34	27.68	134.32	0.21
1600.00	0.31	157.09	1599.65	-19.83	20.23	-19.83	28.33	134.43	0.24
1700.00	0.37	168.91	1699.65	-20.39	20.39	-20.39	28.84	135.00	0.09
1800.00	0.43	180.73	1799.65	-21.08	20.45	-21.08	29.37	135.87	0.10

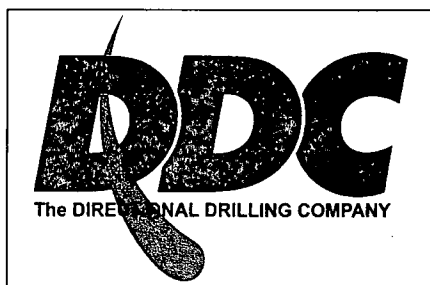
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1900.00	0.46	171.11	1899.65	-21.85	20.51	-21.85	29.97	136.82	0.08
2000.00	0.50	161.49	1999.64	-22.66	20.71	-22.66	30.70	137.58	0.09
2100.00	0.58	154.55	2099.64	-23.54	21.06	-23.54	31.58	138.17	0.10
2200.00	0.66	149.61	2199.63	-24.49	21.57	-24.49	32.63	138.62	0.09
2300.00	1.12	130.77	2299.62	-25.62	22.60	-25.62	34.16	138.58	0.54
2400.00	1.57	111.93	2399.59	-26.76	24.61	-26.76	36.36	137.40	0.63
2500.00	1.94	106.40	2499.55	-27.75	27.50	-27.75	39.07	135.26	0.40
2600.00	2.30	100.86	2599.48	-28.61	31.10	-28.61	42.26	132.61	0.42
2700.00	2.35	99.44	2699.40	-29.33	35.10	-29.33	45.74	129.88	0.07
2800.00	2.40	98.01	2799.31	-29.95	39.20	-29.95	49.33	127.39	0.08
2900.00	2.94	93.00	2899.20	-30.38	43.83	-30.38	53.33	124.73	0.59
3000.00	3.49	87.98	2999.04	-30.41	49.43	-30.41	58.04	121.60	0.61
3100.00	4.02	83.23	3098.83	-29.89	55.95	-29.89	63.43	118.11	0.61
3200.00	4.55	78.47	3198.55	-28.68	63.31	-28.68	69.51	114.37	0.64
3300.00	4.15	75.45	3298.26	-26.98	70.70	-26.98	75.67	110.89	0.46
3400.00	3.74	69.43	3398.03	-24.93	77.25	-24.93	81.17	107.88	0.58
3500.00	3.39	56.56	3497.83	-22.15	82.78	-22.15	85.69	104.98	0.87
3600.00	3.04	40.69	3597.68	-18.51	86.97	-18.51	88.92	102.02	0.95
3700.00	3.35	35.57	3697.52	-14.13	90.40	-14.13	91.50	98.88	0.42
3800.00	3.65	30.44	3797.34	-9.01	93.71	-9.01	94.14	95.49	0.44
3900.00	3.77	31.40	3897.13	-3.46	97.04	-3.46	97.10	92.04	0.14
4000.00	3.89	33.16	3996.90	2.19	100.61	2.19	100.63	88.75	0.17
4100.00	3.24	33.47	4096.71	7.39	104.02	7.39	104.29	85.94	0.65
4200.00	2.60	32.98	4196.58	11.65	106.82	11.65	107.45	83.77	0.65
4300.00	1.95	41.69	4296.50	14.82	109.18	14.82	110.18	82.27	0.73
4400.00	1.31	50.41	4396.46	16.82	111.19	16.82	112.46	81.40	0.69
4500.00	1.39	71.96	4496.43	17.92	113.23	17.92	114.64	81.00	0.51
4600.00	1.47	93.51	4596.40	18.22	115.67	18.22	117.09	81.05	0.54
4700.00	1.77	115.03	4696.36	17.49	118.35	17.49	119.63	81.59	0.67
4800.00	2.06	136.56	4796.31	15.53	120.98	15.53	121.97	82.68	0.77
4900.00	1.52	145.47	4896.26	13.14	122.97	13.14	123.67	83.90	0.61
5000.00	0.98	154.38	4996.23	11.28	124.09	11.28	124.60	84.81	0.57
5100.00	0.90	154.40	5096.22	9.80	124.79	9.80	125.18	85.51	0.08
5200.00	0.82	154.63	5196.21	8.45	125.44	8.45	125.72	86.15	0.08
5300.00	0.66	165.69	5296.20	7.24	125.89	7.24	126.10	86.71	0.22
5400.00	0.50	176.74	5396.20	6.26	126.05	6.26	126.21	87.16	0.20
5500.00	0.47	171.07	5496.19	5.42	126.14	5.42	126.26	87.54	0.06
5600.00	0.44	165.40	5596.19	4.65	126.30	4.65	126.39	87.89	0.05
5700.00	0.40	159.48	5696.19	3.95	126.52	3.95	126.58	88.21	0.06

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
5800.00	0.37	153.55	5796.18	3.34	126.79	3.34	126.83	88.49	0.05
5900.00	0.35	143.31	5896.18	2.81	127.11	2.81	127.14	88.74	0.07
6000.00	0.33	133.07	5996.18	2.37	127.50	2.37	127.52	88.94	0.06
6100.00	0.26	126.45	6096.18	2.04	127.89	2.04	127.91	89.09	0.07
6200.00	0.22	123.83	6196.18	1.80	128.23	1.80	128.24	89.20	0.05
6300.00	0.17	118.38	6296.18	1.62	128.52	1.62	128.53	89.28	0.05
6400.00	0.13	112.93	6396.18	1.51	128.76	1.51	128.77	89.33	0.04
6500.00	0.10	148.35	6496.18	1.39	128.91	1.39	128.92	89.38	0.08
6600.00	0.08	183.77	6596.18	1.24	128.95	1.24	128.96	89.45	0.06
6700.00	0.11	98.14	6696.18	1.16	129.05	1.16	129.05	89.48	0.13
6800.00	0.15	12.51	6796.18	1.28	129.18	1.28	129.18	89.43	0.18
6900.00	0.15	5.53	6896.18	1.54	129.22	1.54	129.23	89.32	0.02
7000.00	0.15	342.56	6996.18	1.80	129.19	1.80	129.20	89.20	0.06
7100.00	0.20	298.41	7096.18	2.01	129.00	2.01	129.01	89.11	0.14
7200.00	0.26	254.26	7196.18	2.03	128.62	2.03	128.64	89.09	0.18
7300.00	0.22	238.78	7296.17	1.87	128.24	1.87	128.26	89.16	0.07
7400.00	0.19	223.29	7396.17	1.66	127.97	1.66	127.98	89.26	0.06
7500.00	0.28	241.58	7496.17	1.42	127.64	1.42	127.64	89.36	0.12
7600.00	0.38	259.86	7596.17	1.24	127.09	1.24	127.09	89.44	0.14
7700.00	0.56	284.58	7696.17	1.31	126.29	1.31	126.29	89.41	0.27
7800.00	0.74	309.30	7796.16	1.84	125.32	1.84	125.33	89.16	0.33
7900.00	0.80	316.74	7896.15	2.75	124.34	2.75	124.37	88.73	0.12
8000.00	0.87	324.17	7996.14	3.88	123.42	3.88	123.48	88.20	0.13
8100.00	0.94	323.11	8096.13	5.15	122.48	5.15	122.59	87.59	0.07
8200.00	1.01	322.05	8196.12	6.49	121.45	6.49	121.62	86.94	0.07
8300.00	0.94	327.05	8296.10	7.87	120.46	7.87	120.72	86.26	0.11
8400.00	0.87	332.05	8396.09	9.23	119.66	9.23	120.02	85.59	0.10
8500.00	0.84	324.59	8496.08	10.50	118.88	10.50	119.34	84.95	0.12
8600.00	0.81	317.12	8596.07	11.62	117.97	11.62	118.54	84.37	0.11
8700.00	0.77	289.71	8696.06	12.37	116.86	12.37	117.51	83.96	0.38
8800.00	0.72	262.30	8796.05	12.51	115.61	12.51	116.28	83.82	0.35
8900.00	0.71	271.49	8896.04	12.44	114.36	12.44	115.04	83.79	0.12
9000.00	0.71	280.68	8996.03	12.57	113.13	12.57	113.83	83.66	0.11
9100.00	0.50	289.81	9096.03	12.83	112.12	12.83	112.85	83.47	0.23
9112.00	0.59	295.40	9108.03	12.88	112.01	12.88	112.75	83.44	0.89

Company Name: Mewbourne Oil Co
Salado Draw 9 AP Fed #1H
Lea County, NM
Rig: Patterson
Created By: Dina Chance
Date: 11/26/2012

Salado Draw 9 AP Fed #1H
Lea County, NM
Q120457 & WT-12824
Design #3 - Tied to Gyro

Mewbourne Oil Company



PROJECT DETAILS: Lea County, NM

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

WELL DETAILS: Salado Draw 9 AP Fed #1H

Ground Level: 3333.0
Northing: 387849.15 Easting: 736659.24
Latitude: 32° 3' 51.428 N Longitude: 103° 34' 10.104 W

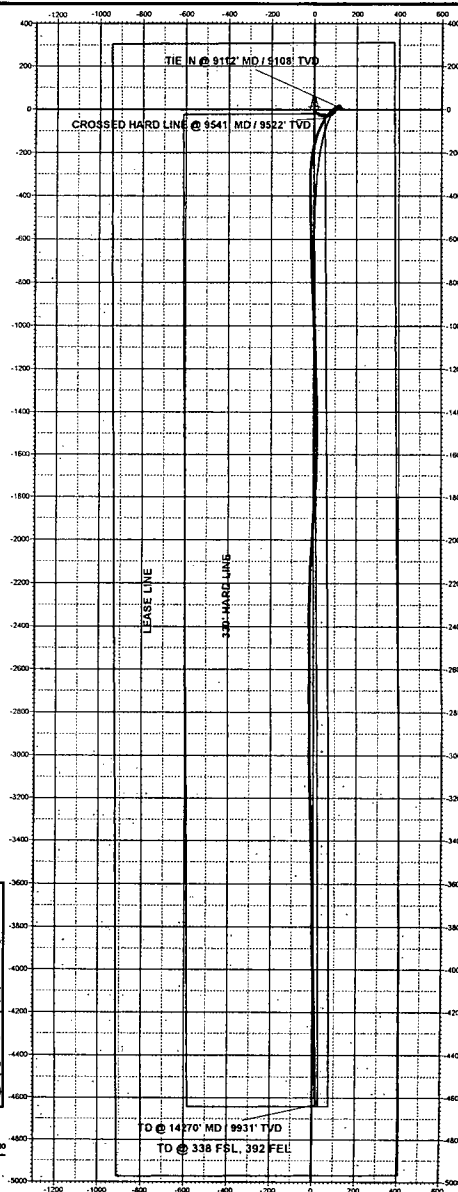
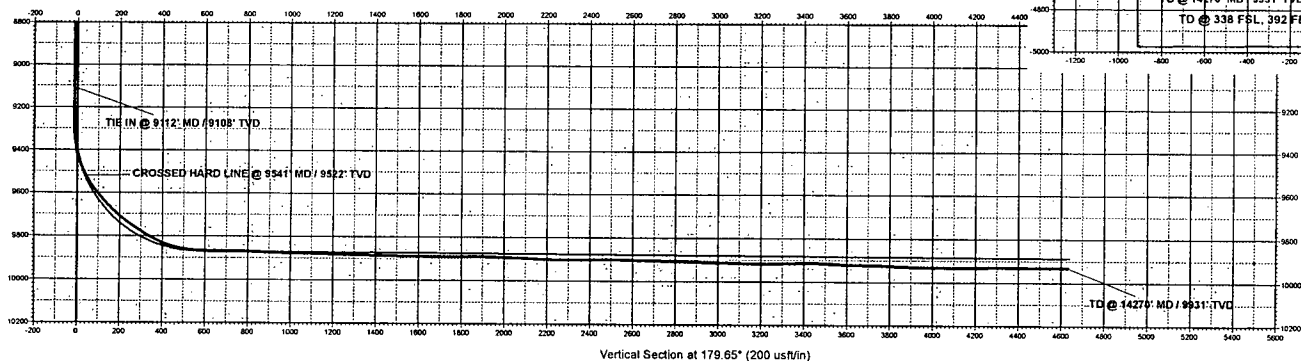
DESIGN TARGET DETAILS

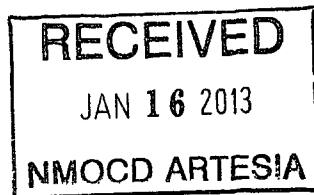
Name: PBHL Salado Draw 9 AP Fed #1H Design #888.0
TVD: -4639.7
+N/-S: 28.1
+E/-W: 383309.40
Northing: 736659.30
Easting: 32° 3' 5.512 N
Latitude: 103° 34' 10.160 W
Longitude: -plan hills target center

ANNOTATIONS

MD	Inc	Adj	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
8112.0	0.89	295.40	9108.0	12.8	112.0	-12.1	199.6	TIE IN @ 9112' MD / 9108' TVD
9541.0	31.60	211.40	9521.7	-41.4	49.8	41.7	285.1	CROSSED HARD LINE @ 9541' MD / 9522' TVD
14270.0	90.00	175.60	9931.4	-4632.2	16.2	4632.2	4889.9	TD @ 14270' MD / 9931' TVD

Azimuths to Grid North
Magnetic North: 7.04°
Magnetic Field
Strength: 48419.5nT
Dip Angle: 60.01°
Date: 6/19/2012
Model: IGRF2010





Mewbourne Oil Co

Lea County, NM

Sec 9-26S-33E

Salado Draw 9 AP Fed #1H

HOBBS OCD

Wellbore #1

JAN 22 2013

Survey: GYRO

RECEIVED

DDC Survey Report

26 November, 2012

SUR: A-9-26S-33E, 310/N & 380/E
BHL: P-9-26S-33E, 4942/N & 364/E
API # 30-025-40755



DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Salado Draw 9 AP Fed #1H
Project:	Lea County, NM	TVD Reference:	WELL @ 3353.0usft (Patterson)
Site:	Sec 9-26S-33E	MD Reference:	WELL @ 3353.0usft (Patterson)
Well:	Salado Draw 9 AP Fed #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Project:	Lea County, NM		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site:	Sec 9-26S-33E				
Site Position:	Northing:	387,949.15 usft	Latitude:	32° 3' 51.428 N	
From:	Map	Easting:	736,630.24 usft	Longitude:	103° 34' 10.104 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.41 °

Well:	Salado Draw 9 AP Fed #1H					
Well Position	+N/-S	0.0 usft	Northing:	387,949.15 usft	Latitude:	32° 3' 51.428 N
	+E/-W	0.0 usft	Easting:	736,630.24 usft	Longitude:	103° 34' 10.104 W
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,333.0 usft	

Wellbore:	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF2010	6/19/2012	(°)	(°)	(nT)
			7.45	60.01	48,420

Design:	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0

Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	179.65

Survey Program	Date: 11/26/2012			
From	To	Survey (Wellbore)	Tool Name	Description
100.0	9,112.0	VES Gyro (Wellbore #1)	Good_gyro	Good Gyro
9,289.0	14,270.0	GYRO (Wellbore #1)	MWD default	MWD - Standard

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
TIE IN @ 9112' MD / 9108' TVD									
9,112.0	0.59	295.40	9,108.0	12.8	112.0	-12.1	0.00	0.00	0.00
9,289.0	4.10	260.50	9,284.9	12.2	105.0	-11.5	2.05	1.98	-19.72
9,320.0	7.60	246.60	9,315.7	11.2	102.0	-10.5	12.10	11.29	-44.84
9,352.0	11.20	238.30	9,347.3	8.7	97.4	-8.1	11.99	11.25	-25.94
9,383.0	14.40	233.30	9,377.5	4.8	91.7	-4.3	10.91	10.32	-16.13
9,415.0	18.10	230.10	9,408.2	-0.8	84.7	1.3	11.89	11.56	-10.00
9,446.0	22.20	226.40	9,437.3	-7.9	76.8	8.4	13.84	13.23	-11.94
9,478.0	25.90	222.40	9,466.5	-17.2	67.7	17.6	12.63	11.56	-12.50
9,510.0	28.80	217.00	9,494.9	-28.5	58.3	28.9	11.92	9.06	-16.88

DDC Survey Report



Company: Mewbourne Oil Co
Project: Lea County, NM
Site: Sec 9-26S-33E
Well: Salado Draw 9 AP Fed #1H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Salado Draw 9 AP Fed #1H
TVD Reference: WELL @ 3353.0usft (Patterson)
MD Reference: WELL @ 3353.0usft (Patterson)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
CROSSED HARD LINE @ 9541' MD / 9522' TVD									
9,541.0	31.60	211.40	9,521.7	-41.4	49.6	41.7	12.80	9.03	-18.06
9,573.0	34.50	207.60	9,548.6	-56.6	41.0	56.9	11.13	9.06	-11.88
9,604.0	37.60	205.50	9,573.6	-73.0	32.9	73.2	10.76	10.00	-6.77
9,636.0	40.40	203.40	9,598.5	-91.3	24.6	91.4	9.67	8.75	-6.56
9,667.0	42.70	200.40	9,621.7	-110.4	16.9	110.5	9.81	7.42	-9.68
9,699.0	45.10	197.70	9,644.7	-131.3	9.7	131.4	9.51	7.50	-8.44
9,730.0	47.40	195.00	9,666.2	-152.8	3.4	152.8	9.73	7.42	-8.71
9,762.0	49.40	192.30	9,687.4	-176.1	-2.2	176.1	8.88	6.25	-8.44
9,793.0	51.10	189.70	9,707.3	-199.5	-6.8	199.4	8.46	5.48	-8.39
9,825.0	52.60	186.70	9,727.0	-224.4	-10.4	224.3	8.74	4.69	-9.38
9,856.0	54.40	185.10	9,745.5	-249.2	-12.9	249.1	7.14	5.81	-5.16
9,888.0	56.10	183.70	9,763.7	-275.4	-14.9	275.3	6.41	5.31	-4.38
9,919.0	58.30	182.50	9,780.5	-301.4	-16.3	301.3	7.81	7.10	-3.87
9,951.0	60.80	180.50	9,796.7	-329.0	-17.0	328.8	9.49	7.81	-6.25
9,982.0	62.90	179.60	9,811.3	-356.3	-17.1	356.2	7.24	6.77	-2.90
10,014.0	65.30	179.50	9,825.3	-385.1	-16.8	385.0	7.51	7.50	-0.31
10,045.0	69.40	179.50	9,837.2	-413.7	-16.6	413.6	13.23	13.23	0.00
10,077.0	73.70	179.50	9,847.4	-444.0	-16.3	443.9	13.44	13.44	0.00
10,108.0	77.20	179.00	9,855.2	-474.0	-15.9	473.9	11.40	11.29	-1.61
10,139.0	81.60	178.50	9,860.9	-504.5	-15.3	504.4	14.28	14.19	-1.61
10,171.0	86.20	178.50	9,864.3	-536.3	-14.4	536.2	14.38	14.38	0.00
10,248.0	88.60	178.50	9,867.8	-613.2	-12.4	613.1	3.12	3.12	0.00
10,280.0	89.10	178.70	9,868.4	-645.1	-11.6	645.1	1.68	1.56	0.63
10,311.0	89.90	178.30	9,868.7	-676.1	-10.8	676.1	2.89	2.58	-1.29
10,342.0	91.10	178.10	9,868.4	-707.1	-9.9	707.0	3.92	3.87	-0.65
10,373.0	89.80	178.00	9,868.2	-738.1	-8.8	738.0	4.21	-4.19	-0.32
10,405.0	88.00	177.90	9,868.8	-770.1	-7.7	770.0	5.63	-5.63	-0.31
10,436.0	87.40	177.60	9,870.0	-801.0	-6.4	801.0	2.16	-1.94	-0.97
10,468.0	87.40	177.20	9,871.5	-833.0	-5.0	832.9	1.25	0.00	-1.25
10,499.0	87.50	177.50	9,872.8	-863.9	-3.6	863.9	1.02	0.32	0.97
10,531.0	87.77	177.90	9,874.2	-895.8	-2.3	895.8	1.51	0.84	1.25
10,594.0	88.30	177.30	9,876.3	-958.7	0.4	958.7	1.27	0.84	-0.95
10,657.0	88.80	177.20	9,877.9	-1,021.7	3.4	1,021.7	0.81	0.79	-0.16
10,720.0	89.20	178.30	9,879.0	-1,084.6	5.9	1,084.6	1.86	0.63	1.75
10,784.0	88.70	178.90	9,880.2	-1,148.6	7.4	1,148.6	1.22	-0.78	0.94
10,847.0	88.70	178.50	9,881.6	-1,211.5	8.8	1,211.6	0.63	0.00	-0.63
10,910.0	88.90	178.00	9,882.9	-1,274.5	10.8	1,274.5	0.85	0.32	-0.79
10,974.0	88.40	178.60	9,884.4	-1,338.4	12.7	1,338.5	1.22	-0.78	0.94
11,036.0	88.50	179.40	9,886.1	-1,400.4	13.8	1,400.5	1.30	0.16	1.29
11,100.0	88.60	179.20	9,887.7	-1,464.4	14.5	1,464.4	0.35	0.16	-0.31
11,163.0	88.90	180.80	9,889.1	-1,527.4	14.5	1,527.4	2.58	0.48	2.54
11,227.0	89.70	181.10	9,889.9	-1,591.4	13.5	1,591.4	1.33	1.25	0.47

DDC Survey Report



Company: Mewbourne Oil Co
Project: Lea County, NM
Site: Sec 9-26S-33E
Well: Salado Draw 9 AP Fed #1H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Salado Draw 9 AP Fed #1H
TVD Reference: WELL @ 3353.0usft (Patterson)
MD Reference: WELL @ 3353.0usft (Patterson)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,290.0	89.10	181.60	9,890.6	-1,654.3	12.0	1,654.4	1.24	-0.95	0.79
11,354.0	89.10	182.40	9,891.6	-1,718.3	9.8	1,718.3	1.25	0.00	1.25
11,417.0	91.50	183.00	9,891.2	-1,781.2	6.8	1,781.2	3.93	3.81	0.95
11,449.0	91.70	183.10	9,890.3	-1,813.2	5.1	1,813.1	0.70	0.63	0.31
11,480.0	90.20	183.20	9,889.8	-1,844.1	3.4	1,844.1	4.85	-4.84	0.32
11,512.0	89.10	183.00	9,890.0	-1,876.1	1.7	1,876.0	3.49	-3.44	-0.63
11,575.0	88.60	182.70	9,891.3	-1,939.0	-1.5	1,938.9	0.93	-0.79	-0.48
11,638.0	87.80	183.90	9,893.3	-2,001.8	-5.1	2,001.8	2.29	-1.27	1.90
11,702.0	87.20	183.80	9,896.1	-2,065.6	-9.4	2,065.5	0.95	-0.94	-0.16
11,765.0	87.70	182.80	9,898.9	-2,128.4	-13.0	2,128.3	1.77	0.79	-1.59
11,797.0	87.30	182.80	9,900.3	-2,160.4	-14.6	2,160.3	1.25	-1.25	0.00
11,828.0	87.80	181.60	9,901.6	-2,191.3	-15.8	2,191.2	4.19	1.61	-3.87
11,860.0	89.90	181.30	9,902.2	-2,223.3	-16.6	2,223.2	6.63	6.56	-0.94
11,891.0	90.40	180.90	9,902.1	-2,254.3	-17.2	2,254.2	2.07	1.61	-1.29
11,954.0	89.60	180.90	9,902.1	-2,317.3	-18.2	2,317.1	1.27	-1.27	0.00
12,018.0	90.10	180.10	9,902.3	-2,381.3	-18.7	2,381.1	1.47	0.78	-1.25
12,081.0	90.60	180.10	9,901.9	-2,444.3	-18.8	2,444.1	0.79	0.79	0.00
12,145.0	89.40	179.30	9,901.9	-2,508.3	-18.5	2,508.1	2.25	-1.88	-1.25
12,208.0	88.60	178.70	9,903.0	-2,571.3	-17.4	2,571.1	1.59	-1.27	-0.95
12,271.0	88.70	180.40	9,904.5	-2,634.2	-16.9	2,634.1	2.70	0.16	2.70
12,335.0	88.80	180.60	9,905.9	-2,698.2	-17.5	2,698.1	0.35	0.16	0.31
12,398.0	88.50	180.30	9,907.4	-2,761.2	-18.0	2,761.0	0.67	-0.48	-0.48
12,461.0	88.20	180.10	9,909.2	-2,824.2	-18.2	2,824.0	0.57	-0.48	-0.32
12,525.0	88.90	180.10	9,910.8	-2,888.2	-18.3	2,888.0	1.09	1.09	0.00
12,588.0	89.00	179.60	9,912.0	-2,951.2	-18.1	2,951.0	0.81	0.16	-0.79
12,651.0	88.60	179.40	9,913.3	-3,014.1	-17.6	3,014.0	0.71	-0.63	-0.32
12,714.0	88.10	179.40	9,915.1	-3,077.1	-16.9	3,076.9	0.79	-0.79	0.00
12,777.0	88.80	178.70	9,916.8	-3,140.1	-15.9	3,139.9	1.57	1.11	-1.11
12,840.0	90.50	178.30	9,917.2	-3,203.0	-14.2	3,202.9	2.77	2.70	-0.63
12,904.0	91.30	177.90	9,916.2	-3,267.0	-12.1	3,266.9	1.40	1.25	-0.63
12,967.0	91.70	178.90	9,914.5	-3,330.0	-10.3	3,329.8	1.71	0.63	1.59
13,031.0	90.60	178.60	9,913.3	-3,393.9	-8.9	3,393.8	1.78	-1.72	-0.47
13,063.0	89.30	178.40	9,913.3	-3,425.9	-8.1	3,425.8	4.11	-4.06	-0.63
13,126.0	87.80	178.10	9,914.9	-3,488.9	-6.2	3,488.8	2.43	-2.38	-0.48
13,190.0	87.30	178.20	9,917.6	-3,552.8	-4.1	3,552.7	0.80	-0.78	0.16
13,254.0	87.80	178.80	9,920.4	-3,616.7	-2.4	3,616.6	1.22	0.78	0.94
13,317.0	89.90	180.60	9,921.6	-3,679.7	-2.1	3,679.6	4.39	3.33	2.86
13,380.0	88.80	180.10	9,922.3	-3,742.7	-2.5	3,742.6	1.92	-1.75	-0.79
13,443.0	87.70	180.10	9,924.3	-3,805.6	-2.6	3,805.5	1.75	-1.75	0.00
13,507.0	86.60	179.10	9,927.4	-3,869.6	-2.2	3,869.5	2.32	-1.72	-1.56
13,539.0	87.70	178.50	9,929.0	-3,901.5	-1.5	3,901.4	3.91	3.44	-1.88
13,562.0	87.70	178.20	9,930.0	-3,924.5	-0.8	3,924.4	1.30	0.00	-1.30
13,593.0	89.00	177.70	9,930.8	-3,955.4	0.3	3,955.4	4.49	4.19	-1.61
13,625.0	89.30	178.40	9,931.3	-3,987.4	1.4	3,987.4	2.38	0.94	2.19

DDC Survey Report



Company: Mewbourne Oil Co
Project: Lea County, NM
Site: Sec 9-26S-33E
Well: Salado Draw 9 AP Fed #1H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Salado Draw 9 AP Fed #1H
TVD Reference: WELL @ 3353.0usft (Patterson)
MD Reference: WELL @ 3353.0usft (Patterson)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,657.0	89.40	178.10	9,931.7	-4,019.4	2.3	4,019.3	0.99	0.31	-0.94
13,688.0	89.20	178.60	9,932.1	-4,050.4	3.2	4,050.3	1.74	-0.65	1.61
13,720.0	90.20	178.90	9,932.2	-4,082.4	3.9	4,082.3	3.26	3.13	0.94
13,783.0	90.10	178.80	9,932.1	-4,145.4	5.2	4,145.3	0.22	-0.16	-0.16
13,846.0	90.70	178.50	9,931.6	-4,208.3	6.7	4,208.3	1.06	0.95	-0.48
13,909.0	90.60	179.00	9,930.9	-4,271.3	8.1	4,271.3	0.81	-0.16	0.79
13,972.0	90.20	178.10	9,930.5	-4,334.3	9.6	4,334.3	1.56	-0.63	-1.43
14,035.0	88.80	178.30	9,931.0	-4,397.3	11.6	4,397.3	2.24	-2.22	0.32
14,067.0	90.40	180.10	9,931.2	-4,429.3	12.1	4,429.3	7.53	5.00	5.63
14,130.0	89.70	178.60	9,931.2	-4,492.3	12.8	4,492.3	2.63	-1.11	-2.38
14,220.0	90.00	178.60	9,931.4	-4,582.2	15.0	4,582.2	0.33	0.33	0.00
TD @ 14270' MD / 9931' TVD									
14,270.0	90.00	178.60	9,931.4	-4,632.2	16.2	4,632.2	0.00	0.00	0.00

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
9,112.0	9,108.0	12.8	112.0	TIE IN @ 9112' MD / 9108' TVD
9,541.0	9,521.7	-41.4	49.6	CROSSED HARD LINE @ 9541' MD / 9522' TVD
14,270.0	9,931.4	-4,632.2	16.2	TD @ 14270' MD / 9931' TVD

Checked By: _____ Approved By: _____ Date: _____

Operating Company Mewbourne
 Well Name & Number alado Draw #9AP Fed Com #1
 Sales Ticket Number _____
 Date 11/24/2012

Company Rep Josh
 Field _____
 BOT Service Rep Charles R Mosley
 District Location Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	P-110	6.276	6.151		0.03826	10,224.00	9,960	6,230
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,211.80	12,410	10,680
Bott Liner										
TVD		9,935.00	KOP		9,265.00	Open Hole		6.125	Casing Vol. (bbl)	383.0
Carry Fluid Weight (ppg)		8.6	Propant Content (ppa)					Max Drill Out Size		0

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press	Max Rate (BPM)	Displ (BBL)
Liner Top	1	JR Setting Sleeve_RH Profile	10011.04							

Zone Length										
	JR Sleeve_S3 Hyd Set Packer		10011.04	8.55	5.813	3.875				
30	4-1/2-13.5 LTC Nipple		10019.59	8.06	4.500	3.920				
	6 Joints of 4-1/2-13.5 LTC Casing		10027.65	229.47	4.500	3.920				
	3.625 EX Frac Sleeve		10257.12	3.90	5.750		3.525	2286	306	387
318	2 Joint of 4-1/2-13.5 LTC Casing		10261.02	76.71	4.500	3.920				
	Baker Open Hole Packer		10337.73	3.89	5.820	3.875		2154		
	2 Joints of 4-1/2-13.5 LTC Casing		10341.62	76.76	4.500	3.920				
29	3.500 EX-C Frac Sleeve		10418.38	3.90	5.750		3.448	2375	299	389
	1 Joint of 4-1/2-13.5 LTC Casing		10422.28	38.71	4.500	3.920				
	Baker Open Hole Packer		10460.99	3.89	5.820	3.875		2154		
123	2 Joints of 4-1/2-13.5 LTC Casing		10464.88	76.66	4.500	3.920				
	3.438 EX-C Frac Sleeve		10541.54	3.90	5.750		3.385	2375	288	391
	2 Joint of 4-1/2-13.5 LTC Casing		10545.44	77.20	4.500	3.920				
28	Baker Open Hole Packer		10622.64	3.89	5.820	3.875		2154		
	2 Joints of 4-1/2-13.5 LTC Casing		10626.53	75.94	4.500	3.920				
	3.375 EX-C Frac Sleeve		10702.47	3.90	5.750		3.323	2375	278	393
161	2 Joint of 4-1/2-13.5 LTC Casing		10706.37	77.10	4.500	3.920				
	Baker Open Hole Packer		10783.47	3.89	5.820	3.875		2154		
	2 Joints of 4-1/2-13.5 LTC Casing		10787.36	77.07	4.500	3.920				
26	3.313 EX-C Frac Sleeve		10864.43	3.90	5.750		3.260	2375	267	396
	1 Joints of 4-1/2-13.5 LTC Casing		10868.33	38.33	4.500	3.920				
	Baker Open Hole Packer		10906.66	3.89	5.820	3.875		2154		

Operating Company Mewbourne
 Well Name & Number alado Draw #9AP Fed Com #1
 Sales Ticket Number
 Date 11/24/2012

Company Rep Josh
 Field
 BOT Service Rep Charles R Mosley
 District Location Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse	
Casing	7.000	26.00	P-110	6.276	6.151		0.03826	10,224.00	9,960	6,230	
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,211.80	12,410	10,680	
Bott Liner											
TVD		9,935.00		KOP		9,265.00		Open Hole	6.125	Casing Vol. (bbl)	383.0
Carry Fluid Weight (ppg)			8.6		Propan Content (ppa)				Max Drill Out Size		0

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press	Max Rate (BPM)	Displ (BBL)
		2 Joints of 4-1/2-13.5 LTC Casing	10910.55	76.34	4.500	3.920				
25		3.250 EX-C Frac Sleeve	10986.89	3.90	5.750		3.198	2375	257	398
159		2 Joint of 4-1/2-13.5 LTC Casing	10990.79	75.12	4.500	3.920				
		Baker Open Hole Packer	11065.91	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	11069.80	77.44	4.500	3.920				
24		3.188 EX-C Frac Sleeve	11147.24	3.90	5.750		3.135	2375	247	400
123		1 Joints of 4-1/2-13.5 LTC Casing	11151.14	37.33	4.500	3.920				
		Baker Open Hole Packer	11188.47	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	11192.36	73.82	4.500	3.920				
23		3.125 EX-C Frac Sleeve	11266.18	3.90	5.750		3.073	2375	237	402
118		1 Joint of 4-1/2-13.5 LTC Casing	11270.08	36.85	4.500	3.920				
		Baker Open Hole Packer	11306.93	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	11310.82	76.71	4.500	3.920				
22		3.063 EX-C Frac Sleeve	11387.53	3.90	5.750		3.010	2375	228	404
123		1 Joints of 4-1/2-13.5 LTC Casing	11391.43	38.70	4.500	3.920				
		Baker Open Hole Packer	11430.13	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	11434.02	77.14	4.500	3.920				
21		3.000 EX-C Frac sleeve	11511.16	3.90	5.750		2.948	2375	218	405
162		2 Joint of 4-1/2-13.5 LTC Casing	11515.06	76.72	4.500	3.920				
		Baker Open Hole Packer	11591.78	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	11595.67	77.53	4.500	3.920				
20		2.938 EX-C Frac Sleeve	11673.20	3.90	5.750		2.885	2375	209	408
124		1 Joints of 4-1/2-13.5 LTC Casing	11677.10	38.38	4.500	3.920				
		Baker Open Hole Packer	11715.48	3.89	5.820	3.875		2154		
		2 Joint of 4-1/2-13.5 LTC Casing	11719.37	76.30	4.500	3.920				
19		2.875 EX-C Frac Sleeve	11795.67	3.90	5.750		2.823	2375	200	410

Operating Company Mewbourne
 Well Name & Number alado Draw #9AP Fed Com #1
 Sales Ticket Number _____
 Date 11/24/2012

Company Rep Josh
 Field _____
 BOT Service Rep Charles R Mosley
 District Location Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	P-110	6.276	6.151		0.03826	10,224.00	9,960	6,230
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,211.80	12,410	10,680
Bott Liner										
TVD		9,935.00	KOP		9,265.00	Open Hole		6.125	Casing Vol. (bbl)	383.0
Carry Fluid Weight (ppg)		8.6	Propant Content (ppa)					Max Drill Out Size		0

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press	Max Rate (BPM)	Displ (BBL)
123		1 Joints of 4-1/2-13.5 LTC Casing	11799.57	38.73	4.500	3.920				
		Baker Open Hole Packer	11838.30	3.89	5.820	3.875		2154		
		2 Joint of 4-1/2-13.5 LTC Casing	11842.19	76.77	4.500	3.920				
18		2.813 EX-C Frac Sleeve	11918.96	3.90	5.750		2.760	2375	192	412
162		2 Joints of 4-1/2-13.5 LTC Casing	11922.86	77.39	4.500	3.920				
		Baker Open Hole Packer	12000.25	3.89	5.820	3.875		2154		
		2 Joint of 4-1/2-13.5 LTC Casing	12004.14	73.95	4.500	3.920				
17		2.750 EX-C Frac Sleeve	12078.09	3.90	5.750		2.698	2375	183	414
120		1 Joints of 4-1/2-13.5 LTC Casing	12081.99	38.64	4.500	3.920				
		Baker Open Hole Packer	12120.63	3.89	5.820	3.875		2154		
		2 Joint of 4-1/2-13.5 LTC Casing	12124.52	76.00	4.500	3.920				
16		2.688 EX-C Frac Sleeve	12200.52	3.90	6.750		2.635	2375	175	416
121		1 Joints of 4-1/2-13.5 LTC Casing	12204.42	36.88	4.500	3.920				
		Baker Open Hole Packer	12241.30	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	12245.19	75.38	4.500	3.920				
15		2.625 EX-C Frac Sleeve	12320.57	3.90	5.750		2.573	2375	166	417
122		1 Joint of 4-1/2-13.5 LTC Casing	12324.47	38.68	4.500	3.920				
		Baker Open Hole Packer	12363.15	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	12367.04	77.37	4.500	3.920				
14		2.563 EX-C Frac Sleeve	12444.41	3.90	5.750		2.510	2375	158	419
162		2 Joints of 4-1/2-13.5 LTC Casing	12448.31	76.66	4.500	3.920				
		Baker Open Hole Packer	12524.97	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	12528.86	74.59	4.500	3.920				
13		2.500 EX-C Frac Sleeve	12603.45	3.90	5.750		2.448	2375	151	422
121		1 Joint of 4-1/2-13.5 LTC Casing	12607.35	38.42	4.500	3.920				
		Baker Open Hole Packer	12645.77	3.89	5.820	3.875		2154		

Operating Company Mewbourne
 Well Name & Number alado Draw #9AP Fed Com #1
 Sales Ticket Number

Company Rep Josh
 Field
 BOT Service Rep Charles R Mosley
 District Location Odessa, Texas, USA



Date 11/24/2012

	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse	
Casing	7.000	26.00	P-110	6.276	6.151		0.03826	10,224.00	9,960	6,230	
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,211.80	12,410	10,680	
Bott Liner											
TVD		9,935.00		KOP		9,265.00		Open Hole	6.125	Casing Vol. (bbl)	383.0
Carry Fluid Weight (ppg)			8.6		Propant Content (ppa)				Max Drill Out Size		0

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seal ID	Shear Press	Max Rate (BPM)	Displ (BBL)
		2 Joints of 4-1/2-13.5 LTC Casing	12649.66	75.04	4.500	3.920				
12		2.438 EX-C Frac Sleeve	12724.70	3.90	5.750		2.386	2375	143	424
160		2 Joints of 4-1/2-13.5 LTC Casing	12728.60	76.76	4.500	3.920				
		Baker Open Hole Packer	12805.36	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	12809.25	76.74	4.500	3.920				
11		2.375 EX-C Frac Sleeve	12885.99	3.90	5.750		2.323	2375	136	426
122		1 Joint of 4-1/2-13.5 LTC Casing	12889.89	37.94	4.500	3.920				
		Baker Open Hole Packer	12927.83	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	12931.72	77.29	4.500	3.920				
10		2.313 EX-C Frac Sleeve	13009.01	3.90	5.750		2.261	2375	129	428
160		2 Joints of 4-1/2-13.5 LTC Casing	13012.91	75.41	4.500	3.920				
		Baker Open Hole Packer	13088.32	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	13092.21	77.15	4.500	3.920				
9		2.250 EX Frac Sleeve	13169.36	3.90	5.750		2.150	2286	114	430
162		2 Joints of 4-1/2-13.5 LTC Casing	13173.26	77.04	4.500	3.920				
		Baker Open Hole Packer	13250.30	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	13254.19	75.17	4.500	3.920				
8		2.125 EX Frac Sleeve	13329.36	3.90	5.750		2.025	2286	101	433
159		2 Joints of 4-1/2-13.5 LTC Casing	13333.26	76.37	4.500	3.920				
		Baker Open Hole Packer	13409.63	3.89	5.820	3.875		2154		
		1 Joint of 4-1/2-13.5 LTC Casing	13413.52	38.34	4.500	3.920				
7		2.000 EX Frac Sleeve	13451.86	3.90	5.750		1.900	2286	89	434
85		1 Joint of 4-1/2-13.5 LTC Casing	13455.76	38.52	4.500	3.920				
		Baker Open Hole Packer	13494.28	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	13498.17	76.24	4.500	3.920				
6		1.875 EX Frac Sleeve	13574.41	3.90	5.750		1.775	2286	78	436

Company Rep	Josh
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	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse		
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Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,211.80	12,410	10,680		
Bott Liner												
TVD		9,935.00		KOP		9,265.00		Open Hole	6.125	Casing Vol. (bbl)	383.0	
Carry Fluid Weight (ppg)			8.6		Propant Content (ppa)				Max Drill Out Size			0

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Company Rep	Josh
Field	
BOT Service Rep	Charles R Mosley
District Location	Odessa, Texas, USA



Carry Fluid Weight (ppg)	8.6	Propant Content (ppa)		Max Drill Out Size	0
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Company Rep	Josh
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Casing	7.000	26.00	P-110	6.276	6.151		0.03826	10,224.00	9,960	6,230	
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TVD		9,935.00		KOP		9,265.00		Open Hole	6.125	Casing Vol. (bbl)	383.0
Carry Fluid Weight (ppg)			8.6		Propanant Content (ppa)				Max Drill Out Size		0

[illegible]

Company Rep	Josh
Field	
BOT Service Rep	Charles R Mosley
District Location	Odessa, Texas, USA

[illegible]

TVD	9,935.00	KOP	9,265.00	Open Hole	6.125	Casing Vol. (bbl)	383.0
Carry Fluid Weight (ppg)	8.6	Propant Content (ppa)				Max Drill Out Size	0

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