

OPERATOR
WELL/LEASE
COUNTY

MEWBOURNE OIL COMPANY
DERRINGER 18 FED COM 2H
EDDY

047-0098

STATE OF NEW MEXICO
DEVIATION REPORT

15- 39758

272	0.12
464	0.23
570	0.33
685	1.40
775	1.14
1,047	0.68
1,053	0.75
1,371	0.18
1,678	0.33
2,091	2.34
2,345	2.34
3,033	1.00
3,415	1.09
3,765	0.67
4,178	1.06
4,591	2.06
4,718	2.18
4,845	1.95
5,003	1.84
5,194	1.26
5,511	0.93
5,765	0.35
6,080	0.94
6,397	1.81



STATE OF TEXAS

COUNTY OF MIDLAND

BY: [Signature]

The foregoing instrument was acknowledged before me on
Steve Moore on behalf of Patterson-UTI Drilling Company LLC.

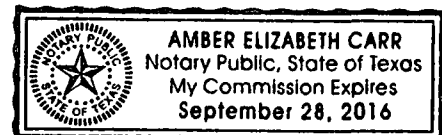
11/16/12, by

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

Received

NOV 13 2012

Mewbourne Oil Company
Hobbs





Company: Mewbourne Oil Company
Lease/Well: Derringer 18 Federal Com/No. 002H

Rig Name: Patterson 47
State/County: New Mexico/Eddy
Latitude: 32.57, Longitude: -104.12
GRID North is 0.11 Degrees East of True North
VS-Azi: 0.00 Degrees



RECEIVED
JAN 28 2013
NMOCD ARTESIA

Depth Reference : RKB = 17.5'

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: gyro survey.ut

Minimum Curvature Method

Report Date/Time: 11/7/2012 / 13:21

Vaughn Energy Services

Midland, Texas

432-563-5444

Surveyor: Tim Dillon

Derringer 18 Federal Com No. 002H / API 30-015-39758

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	0.24	67.56	100.00	0.08	0.19	0.08	0.21	67.56	0.24
200.00	0.30	84.49	200.00	0.18	0.64	0.18	0.67	74.12	0.10
300.00	0.58	62.94	300.00	0.44	1.36	0.44	1.43	72.07	0.32
400.00	0.23	340.84	399.99	0.86	1.74	0.86	1.94	63.88	0.59
500.00	0.60	308.49	499.99	1.37	1.27	1.37	1.87	42.99	0.42
600.00	0.66	52.57	599.99	2.04	1.32	2.04	2.43	32.93	0.99
700.00	1.25	72.78	699.97	2.71	2.82	2.71	3.91	46.14	0.68
800.00	1.30	74.89	799.95	3.33	4.95	3.33	5.97	56.12	0.06
900.00	0.63	108.39	899.93	3.45	6.57	3.45	7.42	62.29	0.84
1000.00	0.80	122.93	999.93	2.89	7.68	2.89	8.20	69.35	0.25
1100.00	0.50	132.29	1099.92	2.22	8.59	2.22	8.87	75.52	0.32
1200.00	0.58	147.97	1199.92	1.49	9.18	1.49	9.30	80.76	0.17
1300.00	0.36	100.64	1299.91	1.01	9.76	1.01	9.81	84.12	0.43
1400.00	0.54	33.16	1399.91	1.34	10.32	1.34	10.41	82.60	0.52
1500.00	1.28	19.44	1499.90	2.79	10.95	2.79	11.30	75.70	0.77
1600.00	1.45	16.59	1599.87	5.06	11.69	5.06	12.74	66.59	0.18
1700.00	1.24	343.46	1699.84	7.31	11.74	7.31	13.83	58.08	0.79
1800.00	1.18	295.13	1799.82	8.79	10.50	8.79	13.69	50.07	0.99
1900.00	2.16	301.00	1899.78	10.20	7.95	10.20	12.93	37.95	0.99
2000.00	2.80	283.26	1999.69	11.73	3.96	11.73	12.38	18.65	0.99

Depth FT	Angle Deg	Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Section FT	Distance FT	Direction Deg	Severity Deg/100
2100.00	2.20	282.06	2099.59	12.69	-0.30	12.69	12.69	358.65	0.60
2200.00	2.01	292.60	2199.52	13.76	-3.80	13.76	14.28	344.56	0.43
2300.00	2.24	286.79	2299.45	15.00	-7.29	15.00	16.68	334.07	0.31
2400.00	2.63	296.94	2399.36	16.61	-11.21	16.61	20.04	325.98	0.58
2500.00	2.49	318.50	2499.27	19.27	-14.70	19.27	24.24	322.67	0.97
2600.00	2.53	298.94	2599.17	21.97	-18.07	21.97	28.44	320.56	0.85
2700.00	2.04	304.70	2699.09	24.05	-21.46	24.05	32.23	318.25	0.54
2800.00	1.48	320.48	2799.05	26.06	-23.75	26.06	35.25	317.65	0.74
2900.00	1.57	331.65	2899.01	28.26	-25.22	28.26	37.87	318.25	0.31
3000.00	1.50	329.66	2998.97	30.60	-26.53	30.60	40.50	319.07	0.09
3100.00	1.28	330.94	3098.95	32.71	-27.74	32.71	42.89	319.70	0.22
3200.00	1.25	320.62	3198.92	34.53	-28.97	34.53	45.07	320.00	0.23
3300.00	1.08	317.94	3298.90	36.07	-30.29	36.07	47.10	319.97	0.17
3400.00	1.00	314.75	3398.88	37.38	-31.55	37.38	48.91	319.84	0.10
3500.00	0.97	324.88	3498.87	38.69	-32.65	38.69	50.63	319.84	0.18
3600.00	0.78	315.58	3598.86	39.87	-33.62	39.87	52.15	319.86	0.23
3700.00	0.74	313.58	3698.85	40.80	-34.56	40.80	53.47	319.73	0.05
3800.00	0.85	312.62	3798.84	41.75	-35.58	41.75	54.85	319.56	0.11
3900.00	1.08	299.48	3898.82	42.72	-36.94	42.72	56.48	319.14	0.32
4000.00	1.06	287.15	3998.81	43.45	-38.65	43.45	58.15	318.35	0.23
4100.00	1.07	294.75	4098.79	44.12	-40.38	44.12	59.81	317.53	0.14
4200.00	1.12	280.33	4198.77	44.68	-42.19	44.68	61.45	316.64	0.28
4300.00	1.66	275.10	4298.74	44.99	-44.58	44.99	63.34	315.26	0.56
4400.00	1.86	256.49	4398.70	44.73	-47.60	44.73	65.32	313.22	0.60
4500.00	2.13	254.73	4498.64	43.87	-50.97	43.87	67.25	310.71	0.28
4600.00	2.55	250.60	4598.55	42.64	-54.87	42.64	69.49	307.85	0.45
4700.00	2.46	251.56	4698.46	41.22	-59.00	41.22	71.97	304.94	0.10
4800.00	2.06	255.43	4798.38	40.09	-62.78	40.09	74.49	302.56	0.42
4900.00	1.86	265.58	4898.32	39.51	-66.13	39.51	77.04	300.86	0.40
5000.00	1.75	260.99	4998.27	39.15	-69.26	39.15	79.55	299.48	0.18
5100.00	1.72	271.16	5098.23	38.94	-72.26	38.94	82.09	298.32	0.31
5200.00	1.49	273.25	5198.19	39.04	-75.06	39.04	84.61	297.48	0.24
5300.00	1.39	271.53	5298.15	39.15	-77.56	39.15	86.88	296.78	0.11
5400.00	1.39	284.19	5398.13	39.48	-79.95	39.48	89.16	296.28	0.31
5500.00	0.84	292.31	5498.11	40.05	-81.80	40.05	91.08	296.09	0.57
5600.00	0.92	283.21	5598.09	40.52	-83.26	40.52	92.60	295.95	0.16
5700.00	0.73	303.88	5698.08	41.06	-84.58	41.06	94.01	295.89	0.35
5800.00	0.77	303.58	5798.08	41.79	-85.67	41.79	95.32	296.00	0.04
5900.00	0.93	315.40	5898.06	42.74	-86.80	42.74	96.75	296.21	0.23
6000.00	1.17	323.40	5998.05	44.13	-87.98	44.13	98.42	296.64	0.29
6100.00	1.03	319.85	6098.03	45.64	-89.16	45.64	100.16	297.10	0.16
6200.00	1.19	312.24	6198.01	47.02	-90.51	47.02	101.99	297.45	0.22



Job Number: S12-153

Company: Mewbourne Oil Company

Lease/Well: Derringer "18" Federal Com # 2 H

Location: Eddy County

Rig Name: Patterson # 47

RKB: N/A

G.L. or M.S.L.: N/A

State/Country: New Mexico / USA

Declination: 7.60° Corrected to Grid

Grid: 7.60°

File name: C:\WINSERVE\DOCS\S12-153.SVY

Date/Time: 19-Dec-12 / 08:58

Curve Name: SES MWD SURVEY RAN ON 11-01-12

Stryker Energy Directional Services, LLC.

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 89.91
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
Tie-In Data Provided by VES Gyro Survey									
6999.00	.37	176.72	6996.87	51.25	-99.25	-99.17	111.70	297.31	.00
7097.00	1.00	194.30	7094.86	50.11	-99.44	-99.36	111.35	296.74	.67
7129.00	1.70	113.10	7126.86	49.65	-99.08	-99.00	110.82	296.62	5.74
7161.00	5.30	90.20	7158.79	49.46	-97.16	-97.08	109.02	296.98	11.85
7192.00	8.90	83.50	7189.55	49.72	-93.34	-93.27	105.76	298.04	11.90
7224.00	12.60	82.80	7220.98	50.44	-87.42	-87.34	100.93	299.98	11.57
7256.00	16.00	84.10	7251.99	51.33	-79.57	-79.49	94.69	302.83	10.67
7288.00	19.80	85.80	7282.43	52.18	-69.77	-69.69	87.13	306.79	11.99
7319.00	24.10	86.30	7311.18	52.98	-58.21	-58.13	78.71	312.30	13.88
7351.00	28.40	87.20	7339.87	53.77	-44.09	-44.00	69.53	320.65	13.49
7383.00	31.40	88.80	7367.61	54.32	-28.15	-28.06	61.18	332.61	9.70
7415.00	34.60	89.70	7394.44	54.54	-10.72	-10.64	55.58	348.88	10.12
7446.00	37.50	90.00	7419.50	54.59	7.52	7.60	55.10	7.84	9.37
7478.00	40.90	91.80	7444.30	54.26	27.73	27.82	60.93	27.08	11.20
7510.00	44.50	92.70	7467.81	53.40	49.41	49.50	72.75	42.78	11.41
7542.00	48.40	92.80	7489.86	52.29	72.58	72.66	89.45	54.23	12.19
7574.00	52.40	92.80	7510.25	51.08	97.20	97.28	109.80	62.28	12.50
7606.00	56.30	93.00	7528.90	49.76	123.16	123.24	132.84	68.00	12.20
7638.00	58.80	93.50	7546.07	48.23	150.12	150.20	157.68	72.19	7.92
7669.00	61.60	94.60	7561.47	46.33	176.95	177.02	182.91	75.33	9.54
7700.00	65.60	95.00	7575.25	44.00	204.61	204.68	209.29	77.86	12.95
7732.00	69.40	95.10	7587.50	41.40	234.06	234.12	237.69	79.97	11.88
7764.00	71.90	95.10	7598.10	38.72	264.13	264.19	266.95	81.66	7.81
7796.00	75.00	93.90	7607.21	36.31	294.70	294.76	296.93	82.98	10.33

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
7827.00	78.70	92.70	7614.26	34.58	324.84	324.89	326.67	83.92	12.52
7856.00	82.40	92.50	7619.02	33.28	353.41	353.46	354.97	84.62	12.78
7938.00	87.30	96.40	7626.39	26.94	434.79	434.83	435.62	86.45	7.62
8001.00	88.00	92.80	7628.97	21.89	497.52	497.56	498.00	87.48	5.82
8064.00	88.60	92.00	7630.84	19.25	560.44	560.47	560.77	88.03	1.59
8127.00	88.60	91.40	7632.38	17.39	623.39	623.42	623.63	88.40	.95
8190.00	88.50	91.30	7633.97	15.90	686.35	686.38	686.54	88.67	.22
8253.00	88.20	90.90	7635.79	14.69	749.32	749.34	749.46	88.88	.79
8317.00	88.60	90.60	7637.57	13.86	813.29	813.31	813.40	89.02	.78
8380.00	88.90	90.20	7638.95	13.42	876.27	876.29	876.37	89.12	.79
8443.00	88.60	89.70	7640.32	13.47	939.25	939.27	939.35	89.18	.93
8507.00	88.70	90.00	7641.83	13.64	1003.24	1003.26	1003.33	89.22	.49
8570.00	88.70	89.90	7643.26	13.69	1066.22	1066.24	1066.31	89.26	.16
8633.00	89.70	90.60	7644.14	13.42	1129.21	1129.23	1129.29	89.32	1.94
8696.00	90.10	91.30	7644.25	12.37	1192.20	1192.22	1192.27	89.41	1.28
8759.00	90.30	91.10	7644.03	11.05	1255.19	1255.20	1255.24	89.50	.45
8823.00	89.10	90.70	7644.36	10.05	1319.18	1319.19	1319.22	89.56	1.98
8886.00	88.00	90.40	7645.96	9.44	1382.15	1382.17	1382.19	89.61	1.81
8949.00	87.40	89.70	7648.49	9.39	1445.10	1445.12	1445.13	89.63	1.46
9012.00	87.20	89.00	7651.45	10.10	1508.03	1508.04	1508.06	89.62	1.15
9075.00	86.70	88.30	7654.81	11.59	1570.92	1570.94	1570.96	89.58	1.36
9139.00	86.70	88.80	7658.49	13.20	1634.79	1634.81	1634.85	89.54	.78
9202.00	87.00	89.70	7661.95	14.03	1697.69	1697.71	1697.75	89.53	1.50
9265.00	87.30	89.70	7665.08	14.36	1760.61	1760.63	1760.67	89.53	.48
9329.00	89.60	89.50	7666.82	14.80	1824.58	1824.61	1824.64	89.54	3.61
9392.00	91.00	89.20	7666.49	15.52	1887.58	1887.60	1887.64	89.53	2.27
9455.00	91.50	88.80	7665.11	16.62	1950.55	1950.58	1950.62	89.51	1.02
9519.00	91.10	88.30	7663.66	18.23	2014.52	2014.54	2014.60	89.48	1.00
9582.00	91.80	89.50	7662.07	19.44	2077.48	2077.51	2077.57	89.46	2.20
9645.00	92.10	90.20	7659.92	19.61	2140.44	2140.47	2140.53	89.48	1.21
9709.00	92.20	89.50	7657.52	19.78	2204.40	2204.43	2204.49	89.49	1.10
9772.00	91.20	89.70	7655.65	20.22	2267.37	2267.40	2267.46	89.49	1.62
9835.00	90.50	89.50	7654.72	20.66	2330.36	2330.39	2330.45	89.49	1.16
9898.00	89.50	90.20	7654.72	20.82	2393.36	2393.39	2393.45	89.50	1.94
9962.00	89.30	90.60	7655.39	20.37	2457.35	2457.38	2457.44	89.52	.70
10025.00	89.20	90.00	7656.21	20.04	2520.35	2520.38	2520.43	89.54	.97
10088.00	89.20	89.30	7657.09	20.43	2583.34	2583.37	2583.42	89.55	1.11
10152.00	89.30	88.40	7657.93	21.71	2647.32	2647.35	2647.41	89.53	1.41
10215.00	88.80	89.00	7658.97	23.14	2710.29	2710.33	2710.39	89.51	1.24
10278.00	88.30	90.20	7660.57	23.58	2773.27	2773.31	2773.37	89.51	2.06
10341.00	88.10	90.00	7662.55	23.47	2836.24	2836.27	2836.34	89.53	.45
10405.00	88.50	89.30	7664.45	23.86	2900.21	2900.24	2900.31	89.53	1.26
10467.00	89.00	88.80	7665.80	24.89	2962.19	2962.22	2962.29	89.52	1.14
10531.00	88.30	89.50	7667.31	25.84	3026.16	3026.20	3026.27	89.51	1.55
10594.00	88.00	90.40	7669.34	25.89	3089.13	3089.16	3089.24	89.52	1.51

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
10658.00	87.50	90.70	7671.85	25.28	3153.08	3153.11	3153.18	89.54	.91
10721.00	87.30	90.90	7674.71	24.40	3216.00	3216.04	3216.10	89.57	.45
10784.00	87.00	90.60	7677.84	23.58	3278.92	3278.95	3279.01	89.59	.67
10848.00	87.10	90.40	7681.14	23.02	3342.83	3342.87	3342.91	89.61	.35
10911.00	88.00	91.10	7683.83	22.20	3405.77	3405.80	3405.84	89.63	1.81
10974.00	87.80	91.10	7686.14	20.99	3468.72	3468.74	3468.78	89.65	.32
11037.00	88.50	90.90	7688.17	19.89	3531.67	3531.70	3531.73	89.68	1.16
11101.00	88.90	90.40	7689.62	19.16	3595.65	3595.68	3595.70	89.69	1.00
11163.00	88.90	89.90	7690.81	19.00	3657.64	3657.67	3657.69	89.70	.81
11226.00	89.00	89.00	7691.97	19.61	3720.63	3720.65	3720.68	89.70	1.44
11290.00	88.30	89.30	7693.48	20.56	3784.60	3784.63	3784.66	89.69	1.19
11353.00	87.80	89.70	7695.62	21.10	3847.56	3847.59	3847.62	89.69	1.02
11416.00	88.40	89.20	7697.71	21.71	3910.52	3910.55	3910.58	89.68	1.24
11479.00	88.50	89.00	7699.41	22.70	3973.49	3973.52	3973.56	89.67	.35
11542.00	88.70	88.10	7700.95	24.29	4036.45	4036.49	4036.53	89.66	1.46
11605.00	88.70	87.60	7702.38	26.65	4099.39	4099.43	4099.48	89.63	.79
11669.00	89.00	87.60	7703.67	29.33	4163.32	4163.36	4163.43	89.60	.47
11732.00	89.10	86.50	7704.71	32.58	4226.23	4226.28	4226.36	89.56	1.75
11795.00	89.40	86.00	7705.54	36.70	4289.09	4289.14	4289.25	89.51	.93
11818.00	89.50	85.80	7705.76	38.34	4312.03	4312.08	4312.20	89.49	.97
Projection To Bit									
11880.00	89.50	85.80	7706.30	42.88	4373.86	4373.92	4374.07	89.44	.00

Operating Company Mewbourne
Well Name & Number Derringer 18 Fed Comm #2H
Sales Ticket Number

Company Rep Brint Hlavaty
Field
BOT Service Rep Joe Sartain



Date 11/10/2012

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	7,919.00	9,960	6,230	
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,156.17	12,410	10,680	
Bott Liner											
TVD	7,705.00		KOP		7,706.00		Open Hole	6.125	Casing Vol. (bbl)	294.0	
Carry Fluid Weight (ppg)			8.4		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	7683.83							

Zone Length										
		JR Sleeve_S3 Hyd Set Packer	7683.83	8.63	5.813	3.875				
		4-1/2-13.5 LTC Nipple	7692.46	7.98	5.000	3.920				
		7 Joints of 4-1/2-13.5 LTC Casing	7700.44	268.77	5.000	3.920				
20	20	3 625 EX Frac Sleeve	7969.21	3.89	5.750		3.525	2286	310	294
		3 Joint of 4-1/2-13.5 LTC Casing	7973.10	113.37	5.000	3.920				
		Baker Open Hole Packer	8086.47	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	8090.36	75.24	5.000	3.920				
19	19	3 500 EX Frac Sleeve	8165.60	3.90	5.750		3.400	2286	289	294
		2 Joint of 4-1/2-13.5 LTC Casing	8169.50	75.48	5.000	3.920				
		Baker Open Hole Packer	8244.98	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	8248.87	76.52	5.000	3.920				
18	18	3 375 EX Frac Sleeve	8325.39	3.90	5.750		3.275	2286	268	294
		3 Joint of 4-1/2-13.5 LTC Casing	8329.29	114.59	5.000	3.920				
		Baker Open Hole Packer	8443.88	3.90	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	8447.78	73.71	5.000	3.920				
17	17	3 250 EX Frac Sleeve	8521.49	3.90	5.750		3.150	2286	248	294
		3 Joint of 4-1/2-13.5 LTC Casing	8525.39	114.08	5.000	3.920				
		Baker Open Hole Packer	8639.47	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	8643.36	77.16	5.000	3.920				
16	16	3 125 EX Frac Sleeve	8720.52	3.90	5.750		3.025	2286	228	294
		3 Joints of 4-1/2-13.5 LTC Casing	8724.42	115.87	5.000	3.920				
		Baker Open Hole Packer	8840.29	3.89	5.820	3.875		2154		

Operating Company Mewbourne
Well Name & Number Derringer 18 Fed Com #2H
Sales Ticket Number

Company Rep Brint Hlavaty
Field
BOT Service Rep Joe Sartain



Date 11/10/2012

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	7,919.00	9,960	6,230
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,156.17	12,410	10,680
Bott Liner										
TVD	7,705.00		KOP		7,706.00		Open Hole	6.125	Casing Vol. (bbl)	294.0
Carry Fluid Weight (ppg)		8.4		Propant Content (ppa)				Max Drill Out Size		0

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press	Max Rate (BPM)	Disp (BBL)
15		2 Joints of 4-1/2-13.5 LTC Casing	8844.18	75.39	5.000	3.920				
	15	3.000 EX Frac sleeve	8919.57	3.90	5.750		2.900	2286	210	294
		2 Joint of 4-1/2-13.5 LTC Casing	8923.47	76.08	5.000	3.920				
		Baker Open Hole Packer	8999.55	3.89	5.820	3.875		2154		
14		2 Joints of 4-1/2-13.5 LTC Casing	9003.44	76.79	5.000	3.920				
	14	2.875 EX Frac Sleeve	9080.23	3.90	5.750		2.775	2286	192	294
		6 Joints of 4-1/2-13.5 LTC Casing	9084.13	226.15	5.000	3.920				
		Baker Open Hole Packer	9310.28	3.89	5.820	3.875		2286		
13		5 Joints of 4-1/2-13.5 LTC Casing	9314.17	185.25	5.000	3.920				
	13	2.750 EX Frac Sleeve	9499.42	3.90	5.750		2.650	2286	175	294
		2 Joint of 4-1/2-13.5 LTC Casing	9503.32	77.25	5.000	3.920				
		Baker Open Hole Packer	9580.57	3.89	5.820	3.875		2286		
12		2 Joints of 4-1/2-13.5 LTC Casing	9584.46	75.50	5.000	3.920				
	12	2.625 EX Frac Sleeve	9659.96	3.90	5.750		2.525	2286	159	294
		3 Joints of 4-1/2-13.5 LTC Casing	9663.86	114.26	5.000	3.920				
		Baker Open Hole Packer	9778.12	3.89	5.820	3.875		2154		
11		2 Joints of 4-1/2-13.5 LTC Casing	9782.01	75.67	5.000	3.920				
	11	2.500 EX Frac Sleeve	9857.68	3.90	5.750		2.400	2286	144	294
		2 Joint of 4-1/2-13.5 LTC Casing	9861.58	76.64	5.000	3.920				
		Baker Open Hole Packer	9938.22	3.89	5.820	3.875		2154		
10		3 Joints of 4-1/2-13.5 LTC Casing	9942.11	114.18	5.000	3.920				
	10	2.375 EX Frac Sleeve	10056.29	3.90	5.750		2.275	2286	129	294
		2 Joints of 4-1/2-13.5 LTC Casing	10060.19	75.20	5.000	3.920				
		Baker Open Hole Packer	10135.39	3.89	5.820	3.875		2154		
9		3 Joint of 4-1/2-13.5 LTC Casing	10139.28	114.42	5.000	3.920				
	9	2.250 EX Frac Sleeve	10253.70	3.90	5.750		2.150	2286	115	294

Operating Company Mewbourne
 Well Name & Number Derringer 18 Fed Comm #2H
 Sales Ticket Number
 Date 11/10/2012

Company Rep Brint Hlavaty
 Field
 BOT Service Rep Joe Sartain
 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	7,919.00	9,960	6,230	
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,156.17	12,410	10,680	
Bott Liner											
TVD		7,705.00		KOP		7,706.00		Open Hole	6.125	Casing Vol. (bbl)	294.0
Carry Fluid Weight (ppg)			8.4		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)
8		2 Joints of 4-1/2-13.5 LTC Casing	10257.60	75.22	5.000	3.920				
		Baker Open Hole Packer	10332.82	3.89	5.820	3.875		2154		
		3 Joint of 4-1/2-13.5 LTC Casing	10336.71	112.79	5.000	3.920				
7	8	2 1/25 EX Frac Sleeve	10449.50	3.90	5.750		2.025	2286	102	294
		2 Joints of 4-1/2-13.5 LTC Casing	10453.40	76.68	5.000	3.920				
		Baker Open Hole Packer	10530.08	3.89	5.820	3.875		2154		
6		3 Joint of 4-1/2-13.5 LTC Casing	10533.97	115.55	5.000	3.920				
	7	2 000 EX Frac Sleeve	10649.52	3.90	5.750		1.900	2286	90	294
		3 Joints of 4-1/2-13.5 LTC Casing	10653.42	115.76	5.000	3.920				
5		Baker Open Hole Packer	10769.18	3.89	5.820	3.875		2154		
		3 Joint of 4-1/2-13.5 LTC Casing	10773.07	115.52	5.000	3.920				
	6	1 875 EX Frac Sleeve	10888.59	3.90	5.750		1.775	2286	79	294
4		2 Joints of 4-1/2-13.5 LTC Casing	10892.49	74.81	5.000	3.920				
		Baker Open Hole Packer	10967.30	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	10971.19	75.98	5.000	3.920				
3	5	1 750 EX Frac Sleeve	11047.17	3.90	5.750		1.650	2286	68	294
		2 Joint of 4-1/2-13.5 LTC Casing	11051.07	76.71	5.000	3.920				
		Baker Open Hole Packer	11127.78	3.89	5.820	3.875		2154		
2		3 Joints of 4-1/2-13.5 LTC Casing	11131.67	115.61	5.000	3.920				
	4	1 625 EX Frac Sleeve	11247.28	3.90	5.750		1.525	2286	58	294
		2 Joints of 4-1/2-13.5 LTC Casing	11251.18	75.86	5.000	3.920				
1		Baker Open Hole Packer	11327.04	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	11330.93	112.19	5.000	3.920				
	3	1 500 DBL Ball Frac Sleeve	11443.12	3.90	5.750		1.400	2286	49	294
		2 Joint of 4-1/2-13.5 LTC Casing	11447.02	75.91	5.000	3.920				
		Baker Open Hole Packer	11522.93	3.89	5.820	3.875		2154		

Company Rep	Brint Hlavaty
Field	
BOT Service Rep	Joe Sartain
District Location	Odessa, Texas, USA

[illegible]