

Results of Directional Survey

API number:	30-025-41438		
OGRID:		Operator:	MURCHISON OIL & GAS INC
		Property:	BETTIS 20 STATE COM # 4H

surface	ULSTR:	N	20	T	24S	R	33E
				200	FSL	1670	FWL

BH Loc	ULSTR:	C	20	T	24S	R	33E
15893	MD	11130.5	TVD	204	FNL	1653	FWL
5076 FSL							

Top Perf/OH	ULSTR:	N	20	T	24S	R	33E
11336	MD	11192.5	TVD	525	FSL	1769	FWL

Bot Perf/OH	ULSTR:	C	20	T	24S	R	33E
15740	MD	11132.8	TVD	357	FNL	1654	FWL
4923 FSL							

	MD	N/S	E/W	VD
	11335.0	323.8	98.6	11173.8
TOP PERFS/OH	11336	324.79	98.72	11192.47
	11367.0	355.4	102.5	11771.1
	15658.0	4640.9	-15.9	11133.5
BOT PERFS/OH	15740	4722.90	-15.99	11132.81
	15753.0	4735.9	-16.0	11132.7

NEXT TO LAST	15858.0	4840.9	-16.8	11131.1
LAST READING	15893.0	4875.9	-17.3	11130.5
TD	15893	4875.90	-17.30	11130.50

Surface Location	200	FS	1670	FW
Projected BHL	5076	FS	1653	FW
Location of				
Top Perfs/OH	525	FS	1769	FW
Bottom Perfs/OH	4923	FS	1654	FW

SUMMARY of Subsurface Locations

Surface Location	N-20-24S-33E	200	FS	1670	FW	Vert. Depth
Top Perfs/OH	N-20-24S-33E	525	FS	1769	FW	11192.47
Bottom Perfs/OH	C-20-24S-33E	4923	FS	1654	FW	11132.81
Projected TD	C-20-24S-33E	5076	FS	1653	FW	11130.50

SEP 17 2014

 MURCHISON OIL & GAS, INC.

Murchison Oil and Gas

Jackson Unit Section 20

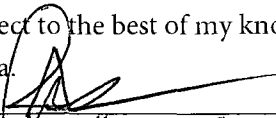
Bettis 20 State Com 4H

Survey: Bettis 20 State Com 4H

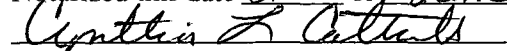
MOJO Standard Survey

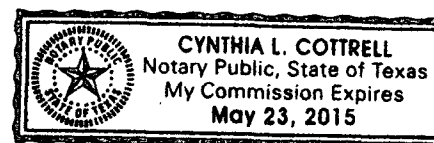
25 June, 2014

This survey is correct to the best of my knowledge and is supported
by actual field data.

 (Signature)

Notarized this date 25th of June, 2014


Notary Signature County of Collin State of Texas



Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well Bettis 20 State Com 4H
Project:	Jackson Unit Section 20	TVD Reference:	WELL @ 3556.6usft (Original Well Elev)
Site:	Bettis 20 State Com 4H	MD Reference:	WELL @ 3556.6usft (Original Well Elev)
Well:	Bettis 20 State Com 4H	North Reference:	Grid
Wellbore:	Bettis 20 State Com 4H	Survey Calculation Method:	Minimum Curvature
Design:	Bettis 20 State Com 4H	Database:	EDM 5000.1 Single User Db

Project	Jackson Unit Section 20		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		Using geodetic scale factor

Site	Bettis 20 State Com 4H		
Site Position:		Northing:	435,984.18 usft
From:	Lat/Long	Easting:	768,963.68 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 11' 47.244 N
		Longitude:	103° 35' 50.865 W
		Grid Convergence:	0.39 °

Well	Bettis 20 State Com 4H		
Well Position	+N/-S	0.0 usft	Northing: 435,984.18 usft
	+E/-W	0.0 usft	Easting: 768,963.68 usft
Position Uncertainty		0.0 usft	Wellhead Elevation: usft
			Latitude: 32° 11' 47.244 N
			Longitude: 103° 35' 50.865 W
			Ground Level: 3,534.6 usft

Wellbore	Bettis 20 State Com 4H		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2010	07/04/2014	7.25
			Dip Angle (°) 60.09
			Field Strength (nT) 48,315

Design	Bettis 20 State Com 4H		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction (°) 359.92

Survey Program	Date 25/06/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
100.0	15,893.0	Bettis 20 State Com 4H (Bettis 20 State C	MWD
			Description MWD - Standard

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Wellbore:	Bettis 20 State Com 4H	Survey Calculation Method:	Minimum Curvature
Design:	Bettis 20 State Com 4H	Database:	EDM 5000.1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
0.0	0.00	0.00	0.0	-3,556.6	0.0	0.0	0.0	0.00	435,984.18	768,963.68	
100.0	1.42	169.16	100.0	-3,456.6	-1.2	0.2	-1.2	1.42	435,982.96	768,963.91	
200.0	1.64	169.12	200.0	-3,356.6	-3.8	0.7	-3.8	0.22	435,980.34	768,964.41	
300.0	1.55	172.01	299.9	-3,256.7	-6.6	1.2	-6.6	0.12	435,977.60	768,964.87	
400.0	1.66	173.83	399.9	-3,156.7	-9.4	1.5	-9.4	0.12	435,974.82	768,965.21	
500.0	1.30	176.50	499.8	-3,056.8	-11.9	1.8	-11.9	0.37	435,972.25	768,965.44	
600.0	1.14	168.63	599.8	-2,956.8	-14.0	2.0	-14.0	0.23	435,970.14	768,965.71	
700.0	1.12	158.42	699.8	-2,856.8	-15.9	2.6	-15.9	0.20	435,968.25	768,966.26	
800.0	1.02	149.67	799.8	-2,756.8	-17.6	3.4	-17.6	0.19	435,966.58	768,967.07	
900.0	1.01	136.45	899.8	-2,656.8	-19.0	4.4	-19.0	0.23	435,965.17	768,968.13	
1,000.0	0.91	136.56	999.8	-2,556.8	-20.2	5.6	-20.2	0.10	435,963.95	768,969.28	
1,100.0	0.74	149.83	1,099.7	-2,456.9	-21.4	6.5	-21.4	0.25	435,962.82	768,970.15	
1,161.9	0.80	163.95	1,161.6	-2,395.0	-22.1	6.8	-22.1	0.32	435,962.06	768,970.47	
Rustler											
1,175.0	0.81	166.65	1,174.7	-2,381.9	-22.3	6.8	-22.3	0.32	435,961.88	768,970.52	
13 3/8"											
1,200.0	0.85	171.47	1,199.7	-2,356.9	-22.7	6.9	-22.7	0.32	435,961.53	768,970.58	
1,300.0	0.93	178.30	1,299.7	-2,256.9	-24.2	7.0	-24.2	0.13	435,959.98	768,970.72	
1,400.0	1.08	180.47	1,399.7	-2,156.9	-26.0	7.1	-26.0	0.15	435,958.23	768,970.73	
1,500.0	1.11	175.80	1,499.7	-2,056.9	-27.9	7.1	-27.9	0.09	435,956.32	768,970.80	
1,600.0	1.06	180.71	1,599.7	-1,956.9	-29.8	7.2	-29.8	0.11	435,954.43	768,970.86	
1,700.0	1.02	183.92	1,699.7	-1,856.9	-31.6	7.1	-31.6	0.07	435,952.62	768,970.79	
1,800.0	1.05	193.10	1,799.6	-1,757.0	-33.3	6.8	-33.4	0.17	435,950.84	768,970.52	
1,900.0	1.10	192.54	1,899.6	-1,657.0	-35.2	6.4	-35.2	0.05	435,949.01	768,970.10	
2,000.0	1.24	197.57	1,999.6	-1,557.0	-37.1	5.9	-37.2	0.17	435,947.04	768,969.57	
2,100.0	1.46	195.79	2,099.6	-1,457.0	-39.4	5.2	-39.4	0.22	435,944.78	768,968.89	
2,200.0	1.48	193.67	2,199.5	-1,357.1	-41.9	4.6	-41.9	0.06	435,942.30	768,968.24	

Company: Murchison Oil and Gas		Local Co-ordinate Reference:					Well Bettis 20 State Com 4H							
Project: Jackson Unit Section 20							TVD Reference:				WELL @ 3556.6usft (Original Well Elev)			
Site: Bettis 20 State Com 4H							MD Reference:				WELL @ 3556.6usft (Original Well Elev)			
Well: Bettis 20 State Com 4H							North Reference:				Grid			
Wellbore: Bettis 20 State Com 4H							Survey Calculation Method:				Minimum Curvature			
Design: Bettis 20 State Com 4H							Database:				EDM 5000.1 Single User Db			
Survey														
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)				
2,300.0	1.46	190.00	2,299.5	-1,257.1	-44.4	4.0	-44.4	0.10	435,939.79	768,967.71				
2,400.0	1.39	187.75	2,399.5	-1,157.1	-46.8	3.7	-46.9	0.09	435,937.34	768,967.33				
2,500.0	1.39	185.28	2,499.4	-1,057.2	-49.3	3.4	-49.3	0.06	435,934.93	768,967.05				
2,600.0	1.30	181.73	2,599.4	-957.2	-51.6	3.2	-51.6	0.12	435,932.59	768,966.91				
2,700.0	1.24	176.43	2,699.4	-857.2	-53.8	3.3	-53.8	0.13	435,930.37	768,966.94				
2,800.0	1.11	170.29	2,799.4	-757.2	-55.8	3.5	-55.9	0.18	435,928.34	768,967.17				
2,900.0	0.98	163.42	2,899.4	-657.2	-57.6	3.9	-57.6	0.18	435,926.56	768,967.58				
3,000.0	0.94	137.58	2,999.3	-557.3	-59.0	4.7	-59.1	0.43	435,925.14	768,968.38				
3,100.0	1.06	123.35	3,099.3	-457.3	-60.2	6.0	-60.2	0.27	435,924.02	768,969.70				
3,200.0	1.41	122.41	3,199.3	-357.3	-61.3	7.8	-61.3	0.35	435,922.86	768,971.51				
3,300.0	1.76	121.92	3,299.3	-257.3	-62.8	10.2	-62.8	0.35	435,921.38	768,973.86				
3,400.0	1.95	117.64	3,399.2	-157.4	-64.4	13.0	-64.4	0.24	435,919.78	768,976.67				
3,500.0	1.92	108.67	3,499.2	-57.4	-65.7	16.1	-65.7	0.30	435,918.46	768,979.76				
3,600.0	2.03	85.58	3,599.1	42.5	-66.1	19.4	-66.2	0.80	435,918.06	768,983.11				
3,700.0	2.46	70.13	3,699.0	142.4	-65.3	23.2	-65.3	0.74	435,918.92	768,986.90				
3,800.0	2.29	70.06	3,798.9	242.3	-63.8	27.1	-63.9	0.17	435,920.33	768,990.79				
3,900.0	1.47	71.18	3,898.9	342.3	-62.8	30.2	-62.8	0.82	435,921.43	768,993.89				
4,000.0	1.28	76.79	3,998.9	442.3	-62.1	32.5	-62.1	0.23	435,922.10	768,996.19				
4,100.0	1.33	85.12	4,098.8	542.2	-61.7	34.8	-61.8	0.20	435,922.45	768,998.43				
4,200.0	1.13	95.62	4,198.8	642.2	-61.7	36.9	-61.8	0.30	435,922.45	769,000.57				
4,300.0	2.26	103.97	4,298.8	742.2	-62.3	39.8	-62.4	1.15	435,921.88	769,003.46				
4,400.0	2.95	112.82	4,398.7	842.1	-63.8	44.1	-63.8	0.80	435,920.41	769,007.75				
4,500.0	1.78	107.94	4,498.6	942.0	-65.3	47.9	-65.3	1.19	435,918.93	769,011.60				
4,600.0	1.97	108.13	4,598.5	1,041.9	-66.3	51.0	-66.3	0.19	435,917.92	769,014.71				
4,700.0	1.24	132.21	4,698.5	1,141.9	-67.5	53.5	-67.6	0.98	435,916.66	769,017.14				
4,800.0	0.80	218.20	4,798.5	1,241.9	-68.8	53.8	-68.9	1.43	435,915.38	769,017.51				
4,900.0	1.47	204.82	4,898.4	1,341.8	-70.5	52.9	-70.6	0.72	435,913.67	769,016.54				

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Well:	Bettis 20 State Com 4H						North Reference:		Grid		
Wellbore:	Bettis 20 State Com 4H						Survey Calculation Method:		Minimum Curvature		
Design:	Bettis 20 State Com 4H						Database:		EDM 5000.1 Single User Db		

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
4,950.0	1.43	198.31	4,948.4	1,391.8	-71.7	52.4	-71.8	0.34	435,912.49	769,016.08	
5,012.0	1.67	195.05	5,010.4	1,453.8	-73.3	51.9	-73.4	0.41	435,910.89	769,015.60	
9 5/8"											
5,031.0	1.74	194.23	5,029.4	1,472.8	-73.8	51.8	-73.9	0.41	435,910.34	769,015.46	
Delaware											
5,045.0	1.80	193.67	5,043.4	1,486.8	-74.3	51.7	-74.3	0.41	435,909.92	769,015.35	
5,140.0	1.58	269.35	5,138.4	1,581.8	-75.7	50.0	-75.8	2.19	435,908.45	769,013.69	
5,234.0	1.58	271.76	5,232.3	1,675.7	-75.7	47.4	-75.8	0.07	435,908.48	769,011.10	
5,329.0	1.71	271.94	5,327.3	1,770.7	-75.6	44.7	-75.7	0.14	435,908.57	769,008.37	
5,424.0	1.80	273.87	5,422.2	1,865.6	-75.5	41.8	-75.5	0.11	435,908.72	769,005.47	
5,522.0	2.42	311.18	5,520.2	1,963.6	-74.0	38.7	-74.1	1.50	435,910.18	769,002.38	
5,617.0	2.20	312.28	5,615.1	2,058.5	-71.5	35.8	-71.5	0.24	435,912.73	768,999.52	
5,713.0	2.20	315.75	5,711.0	2,154.4	-68.9	33.2	-68.9	0.14	435,915.29	768,996.87	
5,807.0	2.20	312.85	5,805.0	2,248.4	-66.4	30.6	-66.4	0.12	435,917.81	768,994.29	
5,905.0	2.11	312.76	5,902.9	2,346.3	-63.9	27.9	-63.9	0.09	435,920.31	768,991.58	
5,995.0	2.11	307.27	5,992.8	2,436.2	-61.7	25.4	-61.8	0.22	435,922.44	768,989.05	
6,025.0	2.14	306.78	6,022.8	2,466.2	-61.1	24.5	-61.1	0.11	435,923.11	768,988.16	
Cherry Canyon											
6,089.0	2.20	305.78	6,086.8	2,530.2	-59.6	22.5	-59.7	0.11	435,924.54	768,986.21	
6,178.0	2.20	306.74	6,175.7	2,619.1	-57.6	19.8	-57.6	0.04	435,926.56	768,983.45	
6,272.0	2.11	305.86	6,269.6	2,713.0	-55.5	16.9	-55.5	0.10	435,928.66	768,980.61	
6,363.0	2.11	303.45	6,360.6	2,804.0	-53.6	14.2	-53.6	0.10	435,930.56	768,977.85	
6,457.0	2.11	303.14	6,454.5	2,897.9	-51.7	11.3	-51.7	0.01	435,932.46	768,974.96	
6,553.0	2.20	302.17	6,550.4	2,993.8	-49.8	8.2	-49.8	0.10	435,934.41	768,971.92	
6,648.0	2.20	305.38	6,645.4	3,088.8	-47.7	5.2	-47.8	0.13	435,936.44	768,968.89	
6,746.0	2.20	303.05	6,743.3	3,186.7	-45.6	2.1	-45.6	0.09	435,938.55	768,965.78	
6,840.0	2.20	303.27	6,837.2	3,280.6	-43.7	-0.9	-43.7	0.01	435,940.52	768,962.76	

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6,935.0	2.29	298.96	6,932.2	3,375.6	-41.7	-4.1	-41.7	0.20	435,942.44	768,959.57	
7,031.0	2.20	293.47	7,028.1	3,471.5	-40.1	-7.5	-40.1	0.24	435,944.11	768,956.20	
7,126.0	0.70	19.96	7,123.1	3,566.5	-38.8	-8.9	-38.8	2.39	435,945.38	768,954.73	
7,221.0	0.62	40.96	7,218.0	3,661.4	-37.9	-8.4	-37.9	0.27	435,946.31	768,955.26	
7,315.0	0.48	45.66	7,312.0	3,755.4	-37.2	-7.8	-37.2	0.16	435,946.97	768,955.88	
7,406.0	0.31	51.86	7,403.0	3,846.4	-36.8	-7.3	-36.8	0.19	435,947.39	768,956.35	
7,506.0	0.09	72.87	7,503.0	3,946.4	-36.6	-7.0	-36.6	0.23	435,947.58	768,956.63	
7,514.0	0.08	74.26	7,511.0	3,954.4	-36.6	-7.0	-36.6	0.19	435,947.58	768,956.64	
Brushy Canyon											
7,601.0	0.09	238.98	7,598.0	4,041.4	-36.6	-7.0	-36.6	0.19	435,947.56	768,956.64	
7,694.0	0.40	255.55	7,691.0	4,134.4	-36.7	-7.4	-36.7	0.34	435,947.44	768,956.26	
7,787.0	0.62	238.67	7,784.0	4,227.4	-37.1	-8.2	-37.1	0.28	435,947.10	768,955.52	
7,883.0	0.48	239.64	7,880.0	4,323.4	-37.6	-8.9	-37.5	0.15	435,946.63	768,954.73	
7,981.0	0.40	205.98	7,978.0	4,421.4	-38.1	-9.5	-38.1	0.27	435,946.11	768,954.22	
8,075.0	0.62	195.47	8,072.0	4,515.4	-38.9	-9.7	-38.8	0.25	435,945.33	768,953.95	
8,169.0	0.70	182.25	8,166.0	4,609.4	-39.9	-9.9	-39.9	0.18	435,944.26	768,953.79	
8,266.0	0.22	268.55	8,263.0	4,706.4	-40.5	-10.1	-40.5	0.74	435,943.67	768,953.58	
8,361.0	1.49	348.84	8,358.0	4,801.4	-39.3	-10.5	-39.3	1.55	435,944.87	768,953.16	
8,457.0	2.68	357.15	8,453.9	4,897.3	-35.8	-10.9	-35.8	1.28	435,948.34	768,952.80	
8,551.0	2.68	357.46	8,547.8	4,991.2	-31.5	-11.1	-31.4	0.02	435,952.73	768,952.60	
8,648.0	2.11	352.75	8,644.8	5,088.2	-27.4	-11.4	-27.4	0.62	435,956.77	768,952.27	
8,744.0	1.80	340.84	8,740.7	5,184.1	-24.2	-12.1	-24.2	0.53	435,959.94	768,951.55	
8,837.0	1.41	324.45	8,833.7	5,277.1	-21.9	-13.3	-21.9	0.64	435,962.26	768,950.41	
8,936.0	1.49	298.66	8,932.6	5,376.0	-20.3	-15.1	-20.3	0.66	435,963.86	768,948.57	
9,030.0	1.41	284.55	9,026.6	5,470.0	-19.4	-17.3	-19.4	0.39	435,964.74	768,946.38	
9,045.0	1.47	282.40	9,041.6	5,485.0	-19.4	-17.7	-19.3	0.53	435,964.83	768,946.01	
Bone Spring											

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:				Well Bettis 20 State Com 4H					
Project:	Jackson Unit Section 20	TVD Reference:				WELL @ 3556.6usft (Original Well Elev)					
Site:	Bettis 20 State Com 4H	MD Reference:				WELL @ 3556.6usft (Original Well Elev)					
Well:	Bettis 20 State Com 4H	North Reference:				Grid					
Wellbore:	Bettis 20 State Com 4H	Survey Calculation Method:				Minimum Curvature					
Design:	Bettis 20 State Com 4H	Database:				EDM 5000.1 Single User Db					
Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
9,122.0	1.80	273.74	9,118.6	5,562.0	-19.1	-19.8	-19.0	0.53	435,965.12	768,943.84	
9,218.0	2.00	329.90	9,214.5	5,657.9	-17.5	-22.2	-17.5	1.87	435,966.67	768,941.50	
Avalon Shale											
9,220.0	2.02	330.78	9,216.5	5,659.9	-17.5	-22.2	-17.4	1.87	435,966.73	768,941.46	
9,315.0	2.90	359.48	9,311.4	5,754.8	-13.6	-23.1	-13.6	1.57	435,970.59	768,940.62	
9,409.0	2.11	35.47	9,405.3	5,848.7	-9.8	-22.1	-9.8	1.83	435,974.38	768,941.61	
9,510.0	0.62	106.66	9,506.3	5,949.7	-8.4	-20.5	-8.4	1.98	435,975.74	768,943.21	
9,605.0	1.49	155.66	9,601.3	6,044.7	-9.7	-19.5	-9.7	1.24	435,974.46	768,944.21	
9,692.0	1.49	143.57	9,688.3	6,131.7	-11.7	-18.3	-11.6	0.36	435,972.52	768,945.35	
9,787.0	1.80	101.47	9,783.2	6,226.6	-12.9	-16.1	-12.9	1.28	435,971.23	768,947.54	
9,886.0	2.29	90.36	9,882.2	6,325.6	-13.3	-12.6	-13.3	0.63	435,970.91	768,951.04	
9,978.0	2.02	123.45	9,974.1	6,417.5	-14.2	-9.4	-14.2	1.36	435,970.01	768,954.24	
10,075.0	2.20	123.05	10,071.0	6,514.4	-16.1	-6.5	-16.1	0.19	435,968.05	768,957.22	
10,109.0	2.09	122.13	10,105.0	6,548.4	-16.8	-5.4	-16.8	0.34	435,967.36	768,958.29	
1st Bone SpringmSand											
10,172.0	1.89	120.15	10,168.0	6,611.4	-18.0	-3.5	-17.9	0.34	435,966.23	768,960.17	
10,205.0	1.89	115.84	10,201.0	6,644.4	-18.5	-2.6	-18.5	0.43	435,965.72	768,961.13	
10,252.0	0.79	108.55	10,248.0	6,691.4	-18.9	-1.5	-18.9	2.36	435,965.28	768,962.13	
10,365.0	0.09	330.47	10,361.0	6,804.4	-19.1	-0.9	-19.1	0.76	435,965.11	768,962.83	
10,448.0	0.48	149.86	10,444.0	6,887.4	-19.3	-0.7	-19.3	0.69	435,964.86	768,962.97	
10,543.0	1.58	126.74	10,538.9	6,982.3	-20.4	0.5	-20.4	1.21	435,963.74	768,964.22	
10,574.0	1.70	126.20	10,569.9	7,013.3	-21.0	1.3	-21.0	0.39	435,963.21	768,964.93	
10,607.0	1.90	132.00	10,602.9	7,046.3	-21.6	2.1	-21.6	0.82	435,962.55	768,965.73	
10,639.0	1.70	37.80	10,634.9	7,078.3	-21.6	2.7	-21.6	8.25	435,962.57	768,966.42	
10,671.0	4.00	15.70	10,666.9	7,110.3	-20.2	3.3	-20.2	7.84	435,964.02	768,967.01	
10,703.0	6.90	16.40	10,698.7	7,142.1	-17.2	4.2	-17.2	9.06	435,966.94	768,967.86	

Company: Murchison Oil and Gas			Local Co-ordinate Reference:					Well Bettis 20 State Com 4H					
Project: Jackson Unit Section 20								TVD Reference:			WELL @ 3556.6usft (Original Well Elev)		
Site: Bettis 20 State Com 4H								MD Reference:			WELL @ 3556.6usft (Original Well Elev)		
Well: Bettis 20 State Com 4H								North Reference:			Grid		
Wellbore: Bettis 20 State Com 4H								Survey Calculation Method:			Minimum Curvature		
Design: Bettis 20 State Com 4H			Database:					EDM 5000.1 Single User Db					
Survey													
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)			
10,704.0	6.97	16.46	10,699.7	7,143.1	-17.1	4.2	-17.1	7.12	435,967.06	768,967.89			
7"													
10,734.0	9.10	17.80	10,729.4	7,172.8	-13.1	5.5	-13.1	7.12	435,971.06	768,969.13			
10,744.0	10.19	18.49	10,739.3	7,182.7	-11.5	6.0	-11.5	10.99	435,972.65	768,969.65			
2nd Bone Spring Sand													
10,766.0	12.60	19.60	10,760.8	7,204.2	-7.4	7.4	-7.4	10.99	435,976.76	768,971.08			
10,797.0	15.60	20.60	10,790.9	7,234.3	-0.3	10.0	-0.3	9.71	435,983.85	768,973.68			
10,829.0	19.50	23.10	10,821.4	7,264.8	8.6	13.6	8.6	12.41	435,992.79	768,977.29			
10,860.0	21.20	23.80	10,850.5	7,293.9	18.5	17.9	18.5	5.54	436,002.68	768,981.58			
10,892.0	24.40	21.90	10,880.0	7,323.4	29.9	22.7	29.9	10.26	436,014.11	768,986.38			
10,924.0	28.70	21.40	10,908.6	7,352.0	43.2	28.0	43.2	13.46	436,027.40	768,991.65			
10,956.0	28.30	22.90	10,936.7	7,380.1	57.4	33.7	57.3	2.56	436,041.54	768,997.41			
10,987.0	26.80	18.20	10,964.2	7,407.6	70.8	38.8	70.7	8.52	436,054.95	769,002.45			
11,018.0	29.50	18.60	10,991.5	7,434.9	84.7	43.4	84.6	8.73	436,068.83	769,007.07			
11,050.0	33.70	19.20	11,018.8	7,462.2	100.5	48.8	100.4	13.16	436,084.69	769,012.50			
11,081.0	37.80	18.00	11,043.9	7,487.3	117.7	54.6	117.6	13.42	436,101.85	769,018.27			
11,113.0	42.40	17.90	11,068.4	7,511.8	137.3	60.9	137.2	14.38	436,121.45	769,024.62			
11,145.0	47.40	16.00	11,091.0	7,534.4	158.9	67.5	158.8	16.18	436,143.06	769,031.19			
11,177.0	52.60	14.40	11,111.6	7,555.0	182.5	73.9	182.4	16.69	436,166.71	769,037.60			
11,208.0	57.90	11.30	11,129.3	7,572.7	207.4	79.6	207.2	18.97	436,191.53	769,043.24			
11,240.0	63.80	10.30	11,144.9	7,588.3	234.8	84.8	234.7	18.64	436,218.97	769,048.47			
11,271.0	68.80	9.50	11,157.3	7,600.7	262.7	89.7	262.6	16.30	436,246.92	769,053.34			
11,303.0	75.20	8.20	11,167.2	7,610.6	292.8	94.3	292.7	20.37	436,276.98	769,058.01			
11,335.0	80.90	7.40	11,173.8	7,617.2	323.8	98.6	323.7	17.98	436,307.98	769,062.26			
11,367.0	87.20	6.90	11,177.1	7,620.5	355.4	102.5	355.2	19.75	436,339.54	769,066.22			
11,397.0	89.00	6.00	11,178.1	7,621.5	385.2	105.9	385.0	6.71	436,369.33	769,069.58			
11,429.0	88.90	5.90	11,178.7	7,622.1	417.0	109.2	416.8	0.44	436,401.16	769,072.90			

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well Bettis 20 State Com 4H
Project:	Jackson Unit Section 20	TVD Reference:	WELL @ 3556.6usft (Original Well Elev)
Site:	Bettis 20 State Com 4H	MD Reference:	WELL @ 3556.6usft (Original Well Elev)
Well:	Bettis 20 State Com 4H	North Reference:	Grid
Wellbore:	Bettis 20 State Com 4H	Survey Calculation Method:	Minimum Curvature
Design:	Bettis 20 State Com 4H	Database:	EDM 5000.1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
11,461.0	89.80	5.10	11,179.1	7,622.5	448.8	112.3	448.7	3.76	436,433.01	769,075.97	
11,493.0	90.60	4.80	11,179.0	7,622.4	480.7	115.1	480.6	2.67	436,464.88	769,078.73	
11,525.0	91.30	5.20	11,178.4	7,621.8	512.6	117.8	512.4	2.52	436,496.76	769,081.52	
11,557.0	91.20	4.00	11,177.7	7,621.1	544.5	120.4	544.3	3.76	436,528.64	769,084.08	
11,589.0	91.90	2.70	11,176.9	7,620.3	576.4	122.3	576.2	4.61	436,560.58	769,085.95	
11,621.0	92.80	2.50	11,175.6	7,619.0	608.4	123.7	608.2	2.88	436,592.52	769,087.40	
11,653.0	93.50	1.50	11,173.8	7,617.2	640.3	124.8	640.1	3.81	436,624.45	769,088.52	
11,684.0	93.30	1.00	11,172.0	7,615.4	671.2	125.5	671.0	1.73	436,655.38	769,089.19	
11,716.0	93.80	0.40	11,170.0	7,613.4	703.2	125.9	703.0	2.44	436,687.32	769,089.58	
11,748.0	92.80	359.60	11,168.1	7,611.5	735.1	125.9	734.9	4.00	436,719.26	769,089.58	
11,780.0	93.00	0.30	11,166.5	7,609.9	767.1	125.9	766.9	2.27	436,751.22	769,089.55	
11,812.0	93.10	0.40	11,164.8	7,608.2	799.0	126.1	798.8	0.44	436,783.17	769,089.75	
11,844.0	92.70	0.60	11,163.2	7,606.6	831.0	126.4	830.8	1.40	436,815.13	769,090.03	
11,875.0	92.10	0.80	11,161.9	7,605.3	861.9	126.7	861.8	2.04	436,846.10	769,090.41	
11,907.0	91.60	359.80	11,160.9	7,604.3	893.9	126.9	893.8	3.49	436,878.08	769,090.57	
11,939.0	91.20	359.20	11,160.1	7,603.5	925.9	126.6	925.7	2.25	436,910.07	769,090.30	
11,971.0	90.60	358.60	11,159.6	7,603.0	957.9	126.0	957.7	2.65	436,942.06	769,089.68	
12,003.0	90.50	358.20	11,159.3	7,602.7	989.9	125.1	989.7	1.29	436,974.04	769,088.79	
12,035.0	90.60	359.00	11,159.0	7,602.4	1,021.9	124.3	1,021.7	2.52	437,006.03	769,088.01	
12,130.0	90.80	356.80	11,157.8	7,601.2	1,116.8	120.9	1,116.6	2.33	437,100.95	769,084.53	
12,225.0	90.80	356.00	11,156.5	7,599.9	1,211.6	114.9	1,211.4	0.84	437,195.75	769,078.56	
12,321.0	91.20	356.60	11,154.8	7,598.2	1,307.4	108.7	1,307.2	0.75	437,291.53	769,072.37	
12,416.0	91.20	356.60	11,152.8	7,596.2	1,402.2	103.1	1,402.1	0.00	437,386.34	769,066.73	
12,512.0	91.90	356.10	11,150.2	7,593.6	1,498.0	97.0	1,497.8	0.90	437,482.11	769,060.63	
12,608.0	92.30	357.80	11,146.7	7,590.1	1,593.8	91.8	1,593.6	1.82	437,577.90	769,055.52	
12,702.0	89.60	357.20	11,145.1	7,588.5	1,687.7	87.7	1,687.5	2.94	437,671.79	769,051.42	
12,798.0	89.50	356.80	11,145.9	7,589.3	1,783.5	82.7	1,783.4	0.43	437,767.65	769,046.40	

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well Bettis 20 State Com 4H
Project:	Jackson Unit Section 20	TVD Reference:	WELL @ 3556.6usft (Original Well Elev)
Site:	Bettis 20 State Com 4H	MD Reference:	WELL @ 3556.6usft (Original Well Elev)
Well:	Bettis 20 State Com 4H	North Reference:	Grid
Wellbore:	Bettis 20 State Com 4H	Survey Calculation Method:	Minimum Curvature
Design:	Bettis 20 State Com 4H	Database:	EDM 5000.1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
12,893.0	89.30	357.20	11,146.9	7,590.3	1,878.4	77.8	1,878.3	0.47	437,862.51	769,041.43	
12,989.0	90.00	357.60	11,147.5	7,590.9	1,974.3	73.4	1,974.2	0.84	437,958.41	769,037.07	
13,085.0	90.20	357.40	11,147.3	7,590.7	2,070.2	69.2	2,070.1	0.29	438,054.31	769,032.88	
13,180.0	90.50	357.20	11,146.7	7,590.1	2,165.1	64.7	2,165.0	0.38	438,149.20	769,028.41	
13,276.0	90.80	356.80	11,145.6	7,589.0	2,260.9	59.7	2,260.9	0.52	438,245.06	769,023.39	
13,372.0	91.20	356.70	11,144.0	7,587.4	2,356.8	54.3	2,356.7	0.43	438,340.89	769,017.94	
13,467.0	89.90	357.00	11,143.1	7,586.5	2,451.6	49.0	2,451.6	1.40	438,435.73	769,012.72	
13,562.0	90.70	356.00	11,142.6	7,586.0	2,546.4	43.3	2,546.4	1.35	438,530.55	769,006.93	
13,658.0	91.30	355.80	11,140.9	7,584.3	2,642.2	36.4	2,642.1	0.66	438,626.29	769,000.06	
13,753.0	91.30	355.80	11,138.7	7,582.1	2,736.9	29.4	2,736.9	0.00	438,721.00	768,993.11	
13,849.0	90.60	355.40	11,137.1	7,580.5	2,832.6	22.1	2,832.6	0.84	438,816.70	768,985.74	
13,944.0	91.00	357.00	11,135.8	7,579.2	2,927.4	15.8	2,927.4	1.74	438,911.48	768,979.45	
14,040.0	88.70	359.10	11,136.1	7,579.5	3,023.3	12.5	3,023.3	3.24	439,007.41	768,976.18	
14,135.0	89.70	359.00	11,137.4	7,580.8	3,118.3	10.9	3,118.3	1.06	439,102.38	768,974.61	
14,229.0	88.80	359.00	11,138.6	7,582.0	3,212.3	9.3	3,212.3	0.96	439,196.36	768,972.97	
14,324.0	89.80	358.40	11,139.8	7,583.2	3,307.2	7.1	3,307.2	1.23	439,291.32	768,970.81	
14,419.0	90.60	357.80	11,139.4	7,582.8	3,402.2	4.0	3,402.2	1.05	439,386.26	768,967.66	
14,515.0	90.40	359.70	11,138.6	7,582.0	3,498.2	1.9	3,498.2	1.99	439,482.23	768,965.57	
14,610.0	90.00	359.40	11,138.3	7,581.7	3,593.2	1.1	3,593.1	0.53	439,577.22	768,964.82	
14,705.0	90.00	358.30	11,138.3	7,581.7	3,688.1	-0.8	3,688.1	1.16	439,672.20	768,962.92	
14,801.0	89.80	359.80	11,138.4	7,581.8	3,784.1	-2.4	3,784.1	1.58	439,768.18	768,961.32	
14,897.0	89.90	359.20	11,138.7	7,582.1	3,880.1	-3.2	3,880.1	0.63	439,864.17	768,960.49	
14,992.0	89.80	358.20	11,138.9	7,582.3	3,975.1	-5.3	3,975.1	1.06	439,959.14	768,958.33	
15,085.0	90.80	358.60	11,138.5	7,581.9	4,068.0	-7.9	4,068.1	1.16	440,052.10	768,955.73	
15,180.0	90.20	359.10	11,137.6	7,581.0	4,163.0	-9.8	4,163.0	0.82	440,147.07	768,953.83	
15,276.0	92.00	359.00	11,135.8	7,579.2	4,259.0	-11.4	4,259.0	1.88	440,243.04	768,952.24	
15,371.0	89.60	359.10	11,134.5	7,577.9	4,354.0	-13.0	4,354.0	2.53	440,338.00	768,950.66	

Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well Bettis 20 State Com 4H
Project:	Jackson Unit Section 20	TVD Reference:	WELL @ 3556.6usft (Original Well Elev)
Site:	Bettis 20 State Com 4H	MD Reference:	WELL @ 3556.6usft (Original Well Elev)
Well:	Bettis 20 State Com 4H	North Reference:	Grid
Wellbore:	Bettis 20 State Com 4H	Survey Calculation Method:	Minimum Curvature
Design:	Bettis 20 State Com 4H	Database:	EDM 5000.1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
15,467.0	91.00	358.70	11,134.0	7,577.4	4,449.9	-14.9	4,450.0	1.52	440,433.98	768,948.82	
15,563.0	89.80	0.20	11,133.3	7,576.7	4,545.9	-15.8	4,545.9	2.00	440,529.97	768,947.90	
15,658.0	90.00	359.60	11,133.5	7,576.9	4,640.9	-15.9	4,640.9	0.67	440,624.96	768,947.73	
15,753.0	90.90	0.30	11,132.7	7,576.1	4,735.9	-16.0	4,735.9	1.20	440,719.95	768,947.65	
15,841.0	90.90	359.10	11,131.3	7,574.7	4,823.9	-16.5	4,823.9	1.36	440,807.94	768,947.19	
15,858.0	90.90	359.10	11,131.1	7,574.5	4,840.9	-16.8	4,840.9	0.00	440,824.93	768,946.92	
4 1/2"											
15,893.0	90.90	359.10	11,130.5	7,573.9	4,875.9	-17.3	4,875.9	0.00	440,859.92	768,946.37	

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
5,012.0	5,010.4	9 5/8"	9-5/8	12-1/4	
1,175.0	1,174.7	13 3/8"	13-3/8	16	
10,704.0	10,699.7	7"	7	8-1/2	
15,858.0	11,131.1	4 1/2"	4-1/2	8-1/2	

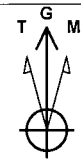
Company:	Murchison Oil and Gas	Local Co-ordinate Reference:	Well Bettis 20 State Com 4H
Project:	Jackson Unit Section 20	TVD Reference:	WELL @ 3556.6usft (Original Well Elev)
Site:	Bettis 20 State Com 4H	MD Reference:	WELL @ 3556.6usft (Original Well Elev)
Well:	Bettis 20 State Com 4H	North Reference:	Grid
Wellbore:	Bettis 20 State Com 4H	Survey Calculation Method:	Minimum Curvature
Design:	Bettis 20 State Com 4H	Database:	EDM 5000.1 Single User Db

Formations				
Measured Depth (usft)	Vertical Depth (usft)	Name	Dip (°)	
10,744.0	10,739.3	2nd Bone Spring Sand	0.00	
1,161.9	1,161.6	Rustler	0.00	
9,218.0	9,214.5	Avalon Shale	0.00	
10,109.0	10,105.0	1st Bone SpringmSand	0.00	
7,514.0	7,511.0	Brushy Canyon	0.00	
5,031.0	5,029.4	Delaware	0.00	
9,045.0	9,041.6	Bone Spring	0.00	
6,025.0	6,022.8	Cherry Canyon	0.00	

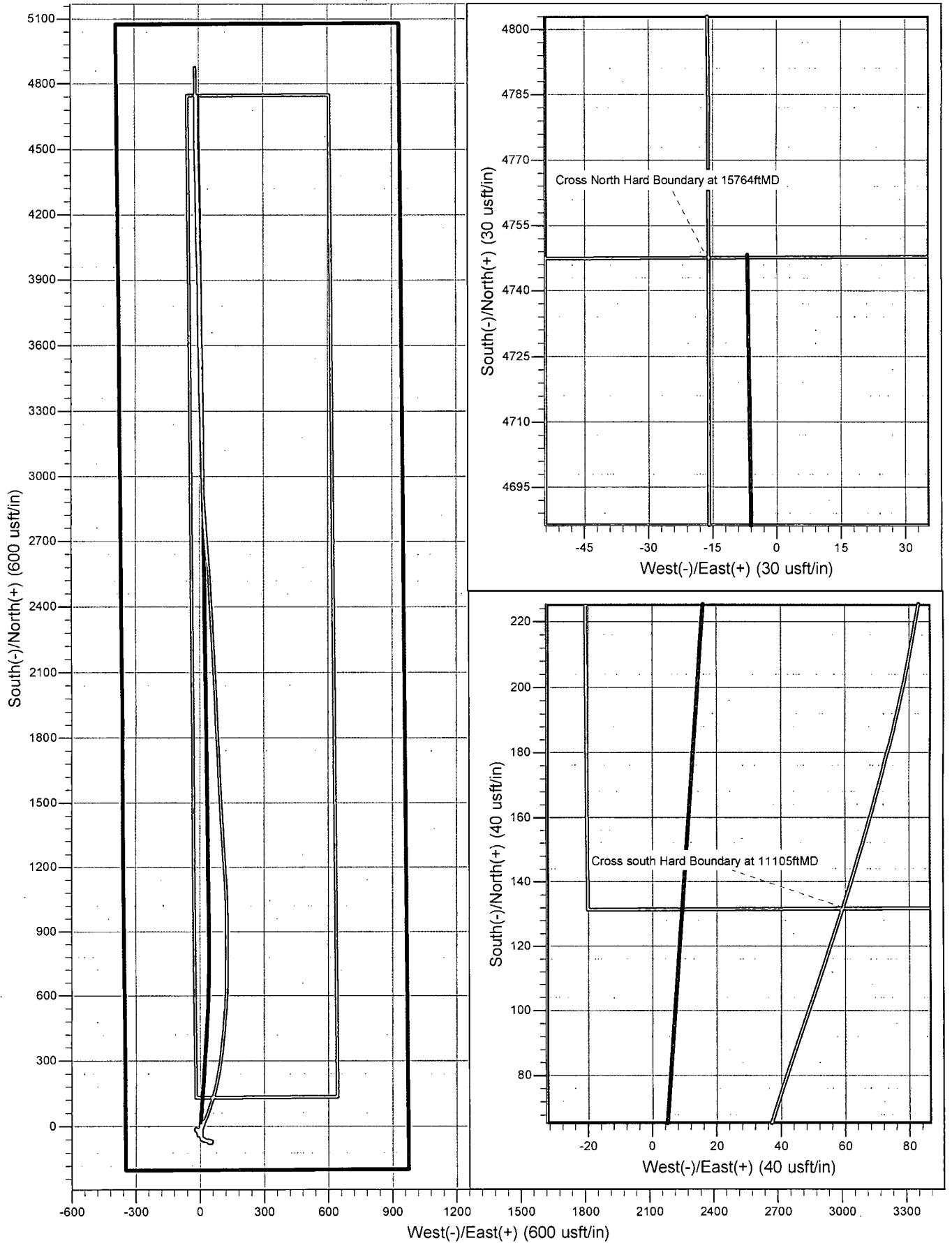
Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
11,105.0	11,062.4	132.2	59.3	Cross south Hard Boundary at 11105ftMD
15,764.0	11,132.5	4,746.9	-16.0	Cross North Hard Boundary at 15764ftMD

Checked By: _____ Approved By: _____ Date: _____

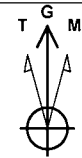
Project: Jackson Unit Section 20
Site: Bettis 20 State Com 4H
Well: Bettis 20 State Com 4H
Wellbore: Bettis 20 State Com 4H
Design: Bettis 20 State Com 4H



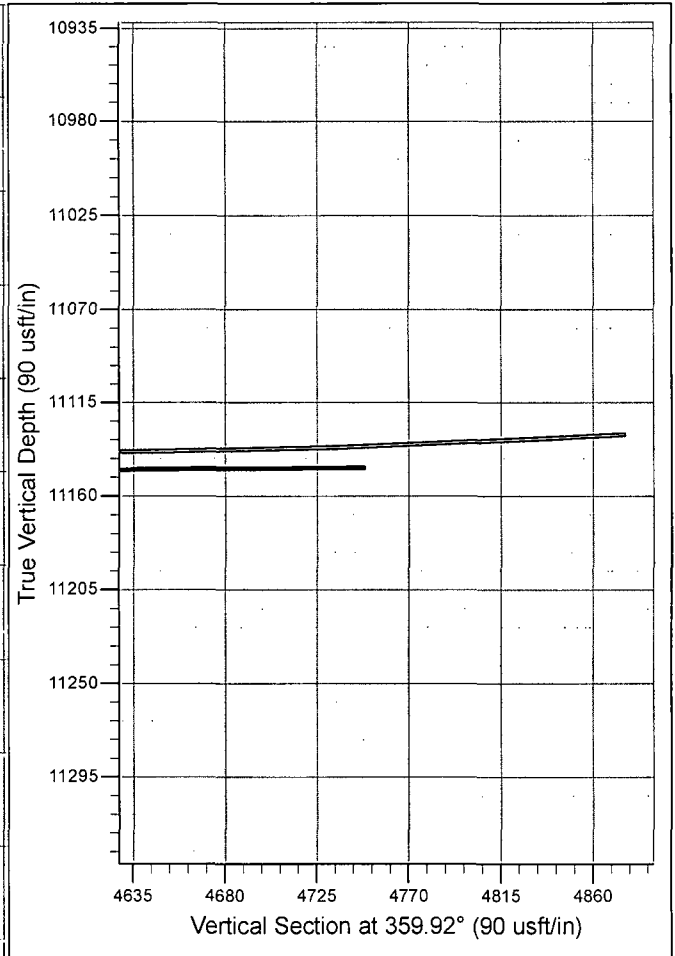
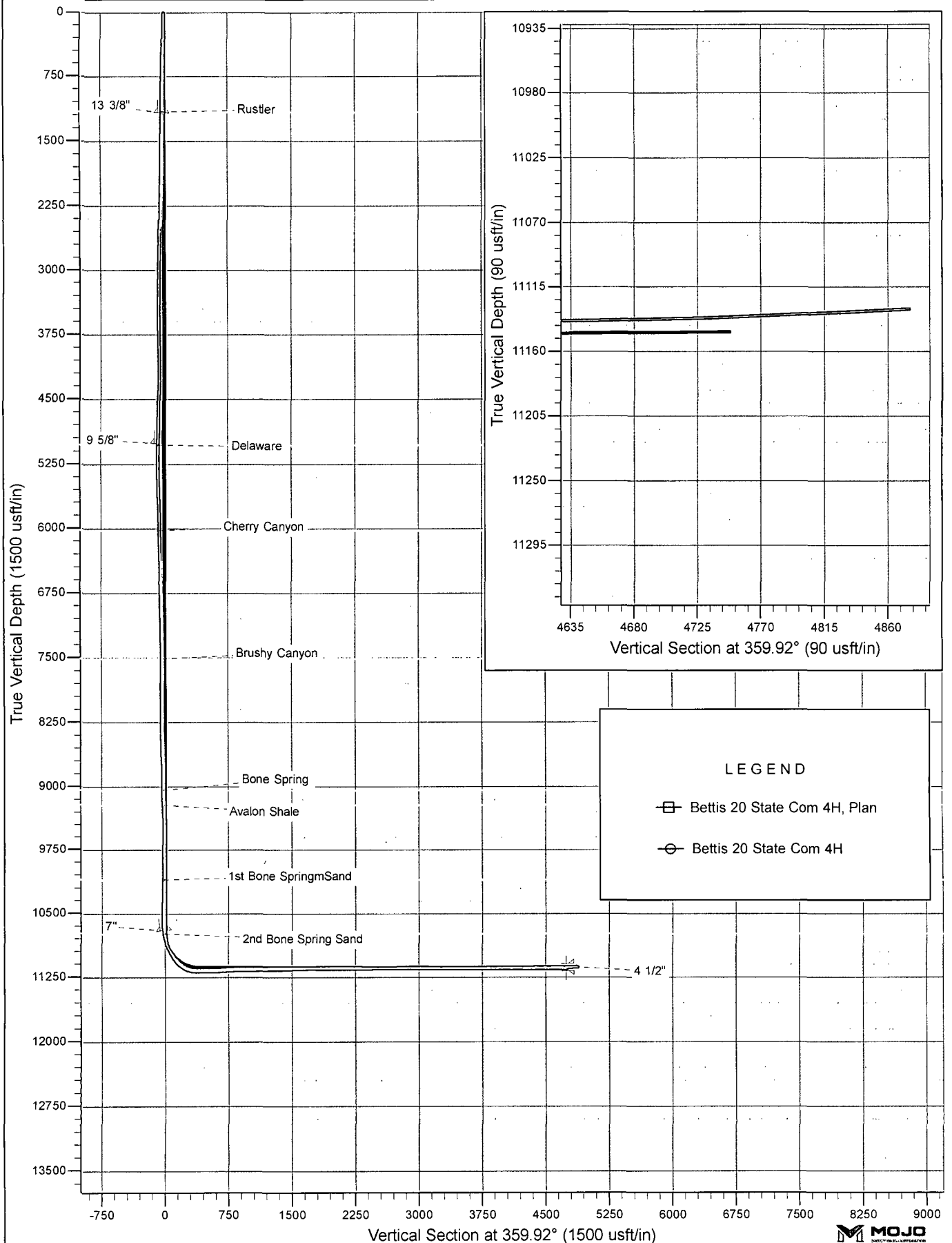
Azimuths to Grid North
True North: -0.39°
Magnetic North: 6.86°
Magnetic Field
Strength: 48314.8nT
Dip Angle: 60.09°
Date: 07/04/2014
Model: IGRF2010



Project: Jackson Unit Section 20
 Site: Bettis 20 State Com 4H
 Well: Bettis 20 State Com 4H
 Wellbore: Bettis 20 State Com 4H
 Design: Bettis 20 State Com 4H



Azimuths to Grid North
 True North: -0.39°
 Magnetic North: 6.86°
 Magnetic Field
 Strength: 48314.8nT
 Dip Angle: 60.09°
 Date: 07/04/2014
 Model: IGRF2010





Job Number: SVMO-140746
 Company: Murchison Oil & Gas
 Lease/Well: Bettis 20 State Com 4H
 Location: Lea County, NM
 Rig Name: Nabors #M28
 RKB: 23'
 G.L. or M.S.L.: GL

State/Country: New Mexico/USA
 Declination: 6.87°
 Grid: East To Grid North
 File name: S:\2014SU~1\MURCHI~1\MOIBETTIS\20STC4H.SVY
 Date/Time: 06-Jun-14 / 16:56
 Curve Name: Surface - 4950' M.D. (Rate Gyro)

MS SURVEY

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

We hereby certify that our survey data from
 Surface MD to 4950 MD is, to the best of
 our knowledge a true and accurate account of
 the well bore.
 Curtis Bingham 6/6/14
 MS Energy Services Date

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	
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
100.00	1.42	169.16	99.99	-1.22	.23	-1.22	1.24	169.16	1.42
200.00	1.64	169.12	199.95	-3.84	.74	-3.84	3.91	169.15	.22
300.00	1.55	172.01	299.92	-6.58	1.19	-6.58	6.69	169.72	.12
400.00	1.66	173.83	399.88	-9.36	1.54	-9.36	9.49	170.67	.12
500.00	1.30	176.50	499.84	-11.94	1.76	-11.94	12.06	171.60	.37
600.00	1.14	168.63	599.82	-14.04	2.03	-14.04	14.19	171.78	.23
700.00	1.12	158.42	699.80	-15.93	2.58	-15.93	16.14	170.79	.20
800.00	1.02	149.67	799.78	-17.60	3.39	-17.60	17.93	169.09	.19
900.00	1.01	136.45	899.77	-19.01	4.45	-19.01	19.52	166.83	.23

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
1000.00	.91	136.56	999.75	-20.23	5.60	-20.23	20.99	164.52	.10
1100.00	.74	149.83	1099.74	-21.36	6.47	-21.36	22.32	163.14	.25
1200.00	.85	171.47	1199.73	-22.65	6.91	-22.65	23.68	163.04	.32
1300.00	.93	178.30	1299.72	-24.20	7.04	-24.20	25.20	163.77	.13
1400.00	1.08	180.47	1399.71	-25.95	7.06	-25.95	26.89	164.78	.15
1500.00	1.11	175.80	1499.69	-27.86	7.12	-27.86	28.76	165.66	.09
1600.00	1.06	180.71	1599.67	-29.75	7.18	-29.75	30.61	166.43	.11
1700.00	1.02	183.92	1699.65	-31.56	7.11	-31.56	32.35	167.31	.07
1800.00	1.05	193.10	1799.64	-33.34	6.84	-33.34	34.04	168.41	.17
1900.00	1.10	192.54	1899.62	-35.17	6.42	-35.17	35.76	169.65	.05
2000.00	1.24	197.57	1999.60	-37.14	5.89	-37.14	37.61	170.99	.17
2100.00	1.46	195.79	2099.57	-39.40	5.22	-39.40	39.74	172.46	.22
2200.00	1.48	193.67	2199.54	-41.88	4.56	-41.88	42.13	173.78	.06
2300.00	1.46	190.00	2299.51	-44.39	4.04	-44.39	44.57	174.80	.10
2400.00	1.39	187.75	2399.47	-46.85	3.65	-46.85	46.99	175.54	.09
2500.00	1.39	185.28	2499.45	-49.26	3.38	-49.26	49.37	176.08	.06
2600.00	1.30	181.73	2599.42	-51.60	3.23	-51.60	51.70	176.42	.12
2700.00	1.24	176.43	2699.39	-53.81	3.26	-53.81	53.91	176.53	.13
2800.00	1.11	170.29	2799.37	-55.85	3.50	-55.85	55.95	176.42	.18
2900.00	.98	163.42	2899.36	-57.62	3.90	-57.62	57.75	176.13	.18
3000.00	.94	137.58	2999.34	-59.04	4.70	-59.04	59.23	175.45	.43
3100.00	1.06	123.35	3099.33	-60.16	6.03	-60.16	60.46	174.28	.27
3200.00	1.41	122.41	3199.30	-61.33	7.84	-61.33	61.83	172.72	.35
3300.00	1.76	121.92	3299.26	-62.80	10.18	-62.80	63.62	170.79	.35
3400.00	1.95	117.64	3399.21	-64.40	12.99	-64.40	65.70	168.60	.24
3500.00	1.92	108.67	3499.16	-65.73	16.08	-65.73	67.66	166.25	.30
3600.00	2.03	85.58	3599.10	-66.12	19.44	-66.12	68.92	163.62	.80
3700.00	2.46	70.13	3699.02	-65.26	23.22	-65.26	69.27	160.41	.74
3800.00	2.29	70.06	3798.94	-63.85	27.12	-63.85	69.37	156.99	.17

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	
3900.00	1.47	71.18	3898.88	-62.75	30.21	-62.75	69.65	154.29	.82
4000.00	1.28	76.79	3998.85	-62.08	32.51	-62.08	70.08	152.36	.23
4100.00	1.33	85.12	4098.83	-61.73	34.76	-61.73	70.84	150.62	.20
4200.00	1.13	95.62	4198.80	-61.73	36.89	-61.73	71.91	149.13	.30
4300.00	2.26	103.97	4298.76	-62.30	39.79	-62.30	73.92	147.44	1.15
4400.00	2.95	112.82	4398.65	-63.77	44.07	-63.77	77.52	145.35	.80
4500.00	1.78	107.94	4498.57	-65.25	47.92	-65.25	80.96	143.70	1.19
4600.00	1.97	108.13	4598.51	-66.26	51.03	-66.26	83.64	142.40	.19
4700.00	1.24	132.21	4698.48	-67.53	53.47	-67.53	86.13	141.63	.98
4800.00	.80	218.20	4798.46	-68.80	53.84	-68.80	87.36	141.96	1.43
4900.00	1.47	204.82	4898.44	-70.51	52.87	-70.51	88.13	143.14	.72
Last Survey Depth Recorded									
4950.00	1.43	198.31	4948.43	-71.69	52.40	-71.69	88.80	143.83	.34