

NORTHERN DELAWARE BASIN

LEA COUNTY, NM

ZEUS

LITTLE BEAR FED COM #6H

OWB

Design: ACTUAL WELLPATH

HOBBS OCD

AUG 02 2019

RECEIVED

Standard Survey Report

18 January, 2019

Survey Report

Company: NORTHERN DELAWARE BASIN
Project: LEA COUNTY, NM
Site: ZEUS
Well: LITTLE BEAR FED COM #6H
Wellbore: OWB
Design: ACTUAL WELLPATH

Local Co-ordinate Reference: Well LITTLE BEAR FED COM #6H
TVD Reference: RKB=3791.1+30 @ 3821.1usft (SCANQUEST)
MD Reference: RKB=3791.1+30 @ 3821.1usft (SCANQUEST)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM_Users

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	ZEUS				
Site Position:		Northing:	597,166.40 usft	Latitude:	32° 38' 24.583 N
From:	Map	Easting:	692,087.80 usft	Longitude:	103° 42' 33.536 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.34 °

Well	LITTLE BEAR FED COM #6H					
Well Position	+N/-S	0.0 usft	Northing:	554,956.00 usft	Latitude:	32° 31' 23.768 N
	+E/-W	0.0 usft	Easting:	740,207.10 usft	Longitude:	103° 33' 14.437 W
Position Uncertainty		3.0 usft	Wellhead Elevation:	usft	Ground Level:	3,791.1 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	WMM2015	4/20/2018	6.90	60.31	48,014.61571032

Design	ACTUAL WELLPATH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	355.46	

Survey Program	Date	1/10/2019			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	10,976.0	GYRO (OWB)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4	
11,005.0	16,280.0	MWD-CURVE/LATERAL (OWB)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction	

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.11	11.77	100.0	0.1	0.0	0.1	0.11	0.11	0.00
125.0	0.10	331.85	125.0	0.1	0.0	0.1	0.29	-0.04	-159.68
150.0	0.22	298.61	150.0	0.2	0.0	0.2	0.59	0.48	-132.96
175.0	0.08	270.77	175.0	0.2	-0.1	0.2	0.62	-0.56	-111.36
200.0	0.17	108.46	200.0	0.2	-0.1	0.2	0.99	0.36	-649.24
225.0	0.13	15.18	225.0	0.2	0.0	0.2	0.88	-0.16	-373.12
250.0	0.15	346.89	250.0	0.3	0.0	0.3	0.28	0.08	-113.16
275.0	0.10	322.49	275.0	0.3	-0.1	0.3	0.29	-0.20	-97.60
300.0	0.09	271.84	300.0	0.3	-0.1	0.3	0.33	-0.04	-202.60

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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)
325.0	0.23	127.91	325.0	0.3	-0.1	0.3	1.23	0.56	-575.72
350.0	0.10	103.18	350.0	0.3	0.0	0.3	0.58	-0.52	-98.92
375.0	0.10	55.38	375.0	0.3	0.0	0.3	0.32	0.00	-191.20
400.0	0.17	42.90	400.0	0.3	0.1	0.3	0.30	0.28	-49.92
425.0	0.17	338.71	425.0	0.4	0.1	0.4	0.72	0.00	-256.76
450.0	0.03	257.40	450.0	0.4	0.1	0.4	0.67	-0.56	-325.24
475.0	0.09	151.21	475.0	0.4	0.1	0.4	0.41	0.24	-424.76
500.0	0.11	46.38	500.0	0.4	0.1	0.4	0.64	0.08	-419.32
525.0	0.12	62.37	525.0	0.4	0.1	0.4	0.13	0.04	63.96
550.0	0.12	345.62	550.0	0.5	0.2	0.4	0.60	0.00	-307.00
575.0	0.06	343.48	575.0	0.5	0.1	0.5	0.24	-0.24	-8.56
600.0	0.10	163.49	600.0	0.5	0.1	0.5	0.64	0.16	-719.96
625.0	0.06	77.30	625.0	0.5	0.2	0.5	0.45	-0.16	-344.76
650.0	0.12	65.27	650.0	0.5	0.2	0.5	0.25	0.24	-48.12
675.0	0.12	71.36	675.0	0.5	0.2	0.5	0.05	0.00	24.36
700.0	0.09	8.19	700.0	0.5	0.3	0.5	0.45	-0.12	-252.68
725.0	0.02	255.41	725.0	0.5	0.3	0.5	0.40	-0.28	-451.12
750.0	0.04	221.28	750.0	0.5	0.3	0.5	0.10	0.08	-136.52
775.0	0.08	119.51	775.0	0.5	0.3	0.5	0.39	0.16	-407.08
800.0	0.11	74.92	800.0	0.5	0.3	0.5	0.31	0.12	-178.36
825.0	0.14	38.76	825.0	0.6	0.4	0.5	0.33	0.12	-144.64
850.0	0.14	13.55	850.0	0.6	0.4	0.6	0.24	0.00	-100.84
875.0	0.11	20.64	875.0	0.7	0.4	0.6	0.13	-0.12	28.36
900.0	0.08	324.86	900.0	0.7	0.4	0.7	0.37	-0.12	-223.12
925.0	0.08	177.78	925.0	0.7	0.4	0.7	0.61	0.00	-588.32
950.0	0.06	181.04	950.0	0.7	0.4	0.6	0.08	-0.08	13.04
975.0	0.14	112.12	975.0	0.6	0.4	0.6	0.52	0.32	-275.68
1,000.0	0.15	109.25	1,000.0	0.6	0.5	0.6	0.05	0.04	-11.48
1,025.0	0.12	64.52	1,025.0	0.6	0.5	0.6	0.43	-0.12	-178.92
1,050.0	0.15	49.28	1,050.0	0.6	0.6	0.6	0.19	0.12	-60.96
1,075.0	0.10	34.08	1,075.0	0.7	0.6	0.6	0.24	-0.20	-60.80
1,100.0	0.10	325.53	1,100.0	0.7	0.6	0.7	0.45	0.00	-274.20
1,125.0	0.05	289.96	1,125.0	0.7	0.6	0.7	0.26	-0.20	-142.28
1,150.0	0.05	210.08	1,150.0	0.7	0.6	0.7	0.26	0.00	-319.52
1,175.0	0.03	202.58	1,175.0	0.7	0.6	0.7	0.08	-0.08	-30.00
1,200.0	0.10	122.31	1,200.0	0.7	0.6	0.7	0.40	0.28	-321.08
1,225.0	0.18	114.82	1,225.0	0.7	0.6	0.6	0.33	0.32	-29.96
1,250.0	0.12	92.35	1,250.0	0.7	0.7	0.6	0.33	-0.24	-89.88
1,275.0	0.11	67.32	1,275.0	0.7	0.7	0.6	0.20	-0.04	-100.12
1,300.0	0.13	357.97	1,300.0	0.7	0.8	0.6	0.55	0.08	-277.40
1,325.0	0.07	342.90	1,325.0	0.7	0.8	0.7	0.26	-0.24	-60.28
1,350.0	0.04	192.20	1,350.0	0.8	0.8	0.7	0.43	-0.12	-602.80
1,375.0	0.10	147.82	1,375.0	0.7	0.8	0.7	0.31	0.24	-177.52

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1,400.0	0.06	109.14	1,400.0	0.7	0.8	0.6	0.28	-0.16	-154.72
1,425.0	0.15	105.53	1,425.0	0.7	0.8	0.6	0.36	0.36	-14.44
1,450.0	0.13	75.20	1,450.0	0.7	0.9	0.6	0.30	-0.08	-121.32
1,475.0	0.15	42.74	1,475.0	0.7	0.9	0.6	0.32	0.08	-129.84
1,500.0	0.13	13.02	1,500.0	0.8	1.0	0.7	0.30	-0.08	-118.88
1,525.0	0.08	346.25	1,525.0	0.8	1.0	0.7	0.28	-0.20	-107.08
1,550.0	0.04	341.43	1,550.0	0.8	1.0	0.8	0.16	-0.16	-19.28
1,575.0	0.08	292.31	1,575.0	0.9	0.9	0.8	0.25	0.16	-196.48
1,600.0	0.07	176.25	1,600.0	0.8	0.9	0.8	0.51	-0.04	-464.24
1,625.0	0.09	149.55	1,625.0	0.8	0.9	0.7	0.17	0.08	-106.80
1,650.0	0.14	98.27	1,650.0	0.8	1.0	0.7	0.44	0.20	-205.12
1,675.0	0.24	103.50	1,675.0	0.8	1.1	0.7	0.41	0.40	20.92
1,700.0	0.18	70.72	1,700.0	0.8	1.2	0.7	0.53	-0.24	-131.12
1,725.0	0.11	2.64	1,725.0	0.8	1.2	0.7	0.69	-0.28	-272.32
1,750.0	0.17	345.74	1,750.0	0.9	1.2	0.8	0.29	0.24	-67.60
1,775.0	0.05	335.37	1,775.0	0.9	1.2	0.8	0.48	-0.48	-41.48
1,800.0	0.02	227.76	1,800.0	0.9	1.2	0.8	0.24	-0.12	-430.44
1,825.0	0.02	287.07	1,825.0	0.9	1.2	0.8	0.08	0.00	237.24
1,850.0	0.16	109.37	1,850.0	0.9	1.2	0.8	0.72	0.56	-710.80
1,875.0	0.28	105.62	1,875.0	0.9	1.3	0.8	0.48	0.48	-15.00
1,900.0	0.43	106.11	1,900.0	0.8	1.4	0.7	0.60	0.60	1.96
1,925.0	0.55	100.12	1,925.0	0.8	1.6	0.7	0.52	0.48	-23.96
1,950.0	0.52	90.16	1,950.0	0.8	1.9	0.6	0.39	-0.12	-39.84
1,975.0	0.64	92.18	1,975.0	0.8	2.1	0.6	0.49	0.48	8.08
2,000.0	0.68	91.56	2,000.0	0.8	2.4	0.6	0.16	0.16	-2.48
2,025.0	0.77	86.62	2,025.0	0.8	2.7	0.6	0.44	0.36	-19.76
2,050.0	0.77	89.63	2,050.0	0.8	3.1	0.5	0.16	0.00	12.04
2,075.0	0.79	87.96	2,075.0	0.8	3.4	0.5	0.12	0.08	-6.68
2,100.0	0.69	94.32	2,100.0	0.8	3.7	0.5	0.52	-0.40	25.44
2,125.0	0.51	24.20	2,125.0	0.9	3.9	0.6	2.82	-0.72	-280.48
2,150.0	1.07	100.67	2,150.0	0.9	4.2	0.6	4.29	2.24	305.88
2,175.0	1.26	107.02	2,175.0	0.8	4.7	0.4	0.92	0.76	25.40
2,200.0	1.09	96.74	2,200.0	0.7	5.2	0.3	1.08	-0.68	-41.12
2,225.0	1.16	95.07	2,225.0	0.6	5.7	0.2	0.31	0.28	-6.68
2,250.0	1.36	99.16	2,250.0	0.6	6.2	0.1	0.88	0.80	16.36
2,275.0	1.59	101.92	2,274.9	0.5	6.8	-0.1	0.96	0.92	11.04
2,300.0	1.69	102.84	2,299.9	0.3	7.5	-0.3	0.41	0.40	3.68
2,325.0	1.80	104.63	2,324.9	0.1	8.3	-0.5	0.49	0.44	7.16
2,350.0	1.84	107.73	2,349.9	-0.1	9.0	-0.8	0.43	0.16	12.40
2,375.0	1.87	108.81	2,374.9	-0.4	9.8	-1.1	0.18	0.12	4.32
2,400.0	1.86	107.30	2,399.9	-0.6	10.6	-1.4	0.20	-0.04	-6.04
2,425.0	1.91	117.59	2,424.9	-0.9	11.3	-1.8	1.37	0.20	41.16
2,450.0	1.86	126.05	2,449.9	-1.3	12.0	-2.3	1.13	-0.20	33.84

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2,475.0	2.00	132.46	2,474.8	-1.9	12.7	-2.9	1.03	0.56	25.64	
2,500.0	2.16	137.56	2,499.8	-2.5	13.3	-3.6	0.98	0.64	20.40	
2,525.0	2.10	137.05	2,524.8	-3.2	14.0	-4.3	0.25	-0.24	-2.04	
2,550.0	1.97	149.64	2,549.8	-3.9	14.5	-5.0	1.86	-0.52	50.36	
2,575.0	2.16	155.76	2,574.8	-4.7	14.9	-5.9	1.16	0.76	24.48	
2,600.0	2.18	161.68	2,599.8	-5.6	15.2	-6.8	0.90	0.08	23.68	
2,625.0	2.21	167.93	2,624.7	-6.5	15.5	-7.7	0.96	0.12	25.00	
2,650.0	2.23	172.63	2,649.7	-7.5	15.7	-8.7	0.73	0.08	18.80	
2,675.0	2.63	172.15	2,674.7	-8.5	15.8	-9.7	1.60	1.60	-1.92	
2,700.0	2.64	176.10	2,699.7	-9.7	15.9	-10.9	0.73	0.04	15.80	
2,725.0	2.54	190.59	2,724.7	-10.8	15.9	-12.0	2.64	-0.40	57.96	
2,750.0	2.92	187.29	2,749.6	-12.0	15.7	-13.2	1.64	1.52	-13.20	
2,775.0	3.14	192.11	2,774.6	-13.3	15.4	-14.4	1.35	0.88	19.28	
2,800.0	3.29	194.52	2,799.6	-14.6	15.1	-15.8	0.81	0.60	9.64	
2,825.0	3.50	194.88	2,824.5	-16.1	14.7	-17.2	0.84	0.84	1.44	
2,850.0	3.51	197.49	2,849.5	-17.5	14.3	-18.6	0.64	0.04	10.44	
2,875.0	3.61	198.05	2,874.4	-19.0	13.8	-20.0	0.42	0.40	2.24	
2,900.0	3.66	198.31	2,899.4	-20.5	13.4	-21.5	0.21	0.20	1.04	
2,925.0	3.53	201.64	2,924.3	-22.0	12.8	-22.9	0.98	-0.52	13.32	
2,950.0	3.24	207.92	2,949.3	-23.3	12.2	-24.2	1.88	-1.16	25.12	
2,975.0	2.85	217.30	2,974.2	-24.4	11.5	-25.3	2.53	-1.56	37.52	
3,000.0	2.62	222.05	2,999.2	-25.4	10.7	-26.1	1.29	-0.92	19.00	
3,025.0	2.54	222.72	3,024.2	-26.2	10.0	-26.9	0.34	-0.32	2.68	
3,050.0	2.41	221.95	3,049.2	-27.0	9.2	-27.6	0.54	-0.52	-3.08	
3,075.0	2.16	221.89	3,074.1	-27.7	8.6	-28.3	1.00	-1.00	-0.24	
3,100.0	2.10	221.59	3,099.1	-28.4	8.0	-29.0	0.24	-0.24	-1.20	
3,125.0	1.90	217.33	3,124.1	-29.1	7.4	-29.6	1.00	-0.80	-17.04	
3,150.0	1.74	210.88	3,149.1	-29.7	7.0	-30.2	1.04	-0.64	-25.80	
3,175.0	1.59	207.22	3,174.1	-30.4	6.6	-30.8	0.74	-0.60	-14.64	
3,200.0	1.51	196.08	3,199.1	-31.0	6.4	-31.4	1.24	-0.32	-44.56	
3,225.0	1.39	191.58	3,224.1	-31.6	6.2	-32.0	0.66	-0.48	-18.00	
3,250.0	1.38	183.90	3,249.1	-32.2	6.1	-32.6	0.75	-0.12	-30.72	
3,275.0	1.41	175.73	3,274.0	-32.8	6.1	-33.2	0.81	0.20	-32.68	
3,300.0	1.61	166.83	3,299.0	-33.5	6.2	-33.9	1.23	0.80	-35.60	
3,325.0	1.84	155.19	3,324.0	-34.2	6.5	-34.6	1.67	0.92	-46.56	
3,350.0	2.19	149.91	3,349.0	-34.9	6.9	-35.4	1.58	1.40	-21.12	
3,375.0	2.14	148.73	3,374.0	-35.8	7.4	-36.2	0.27	-0.20	-4.72	
3,400.0	2.21	147.40	3,399.0	-36.6	7.9	-37.1	0.35	0.28	-5.32	
3,425.0	2.29	147.30	3,424.0	-37.4	8.4	-37.9	0.32	0.32	-0.40	
3,450.0	2.14	150.11	3,448.9	-38.2	8.9	-38.8	0.74	-0.60	11.24	
3,475.0	2.11	153.98	3,473.9	-39.0	9.3	-39.7	0.59	-0.12	15.48	
3,500.0	2.22	158.63	3,498.9	-39.9	9.7	-40.5	0.83	0.44	18.60	
3,525.0	2.36	164.30	3,523.9	-40.8	10.0	-41.5	1.06	0.56	22.68	
3,550.0	2.38	168.54	3,548.9	-41.9	10.3	-42.5	0.71	0.08	16.96	

Survey Report

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Project: LEA COUNTY, NM
Site: ZEUS
Well: LITTLE BEAR FED COM #6H
Wellbore: OWB
Design: ACTUAL WELLPATH

Local Co-ordinate Reference: Well LITTLE BEAR FED COM #6H
TVD Reference: RKB=3791.1+30 @ 3821.1usft (SCANQUEST)
MD Reference: RKB=3791.1+30 @ 3821.1usft (SCANQUEST)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM_Users

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)
3,575.0	2.53	173.76	3,573.8	-42.9	10.4	-43.6	1.08	0.60	20.88
3,600.0	2.76	183.02	3,598.8	-44.1	10.5	-44.7	1.94	0.92	37.04
3,625.0	2.93	187.45	3,623.8	-45.3	10.4	-46.0	1.11	0.68	17.72
3,650.0	2.95	191.17	3,648.8	-46.6	10.1	-47.2	0.77	0.08	14.88
3,675.0	2.94	194.24	3,673.7	-47.8	9.9	-48.4	0.63	-0.04	12.28
3,700.0	3.07	203.88	3,698.7	-49.0	9.4	-49.6	2.08	0.52	38.56
3,725.0	3.12	211.28	3,723.6	-50.2	8.8	-50.8	1.61	0.20	29.60
3,750.0	3.16	216.65	3,748.6	-51.4	8.0	-51.8	1.19	0.16	21.48
3,775.0	3.15	219.25	3,773.6	-52.5	7.2	-52.9	0.57	-0.04	10.40
3,800.0	3.22	223.13	3,798.5	-53.5	6.3	-53.8	0.91	0.28	15.52
3,825.0	3.33	228.33	3,823.5	-54.5	5.3	-54.7	1.27	0.44	20.80
3,850.0	3.38	234.85	3,848.4	-55.4	4.1	-55.6	1.54	0.20	26.08
3,875.0	3.65	240.10	3,873.4	-56.2	2.8	-56.3	1.68	1.08	21.00
3,900.0	3.72	243.34	3,898.4	-57.0	1.4	-56.9	0.88	0.28	12.96
3,925.0	3.86	245.76	3,923.3	-57.7	-0.1	-57.5	0.85	0.56	9.68
3,950.0	3.83	248.19	3,948.2	-58.4	-1.6	-58.0	0.66	-0.12	9.72
3,975.0	4.05	247.94	3,973.2	-59.0	-3.2	-58.6	0.88	0.88	-1.00
4,000.0	4.33	250.55	3,998.1	-59.6	-4.9	-59.1	1.35	1.12	10.44
4,025.0	4.43	252.26	4,023.0	-60.2	-6.7	-59.5	0.66	0.40	6.84
4,050.0	4.70	253.59	4,048.0	-60.8	-8.6	-60.0	1.16	1.08	5.32
4,075.0	4.85	253.88	4,072.9	-61.4	-10.6	-60.4	0.61	0.60	1.16
4,100.0	5.03	253.80	4,097.8	-62.0	-12.7	-60.8	0.72	0.72	-0.32
4,125.0	5.11	253.43	4,122.7	-62.6	-14.8	-61.3	0.35	0.32	-1.48
4,150.0	5.19	252.34	4,147.6	-63.3	-17.0	-61.8	0.51	0.32	-4.36
4,175.0	5.37	254.78	4,172.5	-63.9	-19.2	-62.2	1.15	0.72	9.76
4,200.0	5.54	255.35	4,197.4	-64.6	-21.5	-62.7	0.71	0.68	2.28
4,225.0	5.72	258.74	4,222.2	-65.1	-23.8	-63.1	0.90	0.72	5.56
4,250.0	5.88	256.22	4,247.1	-65.7	-26.3	-63.5	0.60	0.56	-2.08
4,275.0	5.76	257.37	4,272.0	-66.3	-28.8	-63.8	0.61	-0.40	4.60
4,300.0	5.98	255.01	4,296.9	-66.9	-31.2	-64.2	1.31	0.88	-9.44
4,325.0	6.14	254.67	4,321.7	-67.6	-33.8	-64.7	0.66	0.64	-1.36
4,350.0	6.20	253.76	4,346.6	-68.3	-36.4	-65.3	0.48	0.24	-3.64
4,375.0	6.33	253.29	4,371.4	-69.1	-39.0	-65.8	0.56	0.52	-1.88
4,400.0	6.17	252.20	4,396.3	-69.9	-41.6	-66.4	0.80	-0.64	-4.36
4,425.0	6.14	249.27	4,421.1	-70.8	-44.1	-67.1	1.26	-0.12	-11.72
4,450.0	6.11	249.44	4,446.0	-71.8	-46.6	-67.8	0.14	-0.12	0.68
4,475.0	6.37	250.01	4,470.8	-72.7	-49.2	-68.6	1.07	1.04	2.28
4,500.0	6.04	248.98	4,495.7	-73.6	-51.7	-69.3	1.39	-1.32	-4.12
4,525.0	6.08	249.01	4,520.6	-74.6	-54.2	-70.1	0.16	0.16	0.12
4,550.0	6.16	249.01	4,545.4	-75.5	-56.7	-70.8	0.32	0.32	0.00
4,575.0	6.21	249.19	4,570.3	-76.5	-59.2	-71.6	0.21	0.20	0.72
4,600.0	6.77	251.02	4,595.1	-77.5	-61.8	-72.3	2.39	2.24	7.32
4,625.0	6.61	253.60	4,619.9	-78.3	-64.6	-73.0	1.36	-0.64	10.32

Survey Report

Company: NORTHERN DELAWARE BASIN
Project: LEA COUNTY, NM
Site: ZEUS
Well: LITTLE BEAR FED COM #6H
Wellbore: OWB
Design: ACTUAL WELLPATH

Local Co-ordinate Reference: Well LITTLE BEAR FED COM #6H
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MD Reference: RKB=3791.1+30 @ 3821.1usft (SCANQUEST)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM_Users

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)
4,650.0	6.76	252.92	4,644.8	-79.2	-67.4	-73.6	0.68	0.60	-2.72
4,675.0	6.94	254.61	4,669.6	-80.0	-70.3	-74.2	1.08	0.72	6.76
4,700.0	6.96	254.09	4,694.4	-80.8	-73.2	-74.8	0.26	0.08	-2.08
4,725.0	6.91	254.54	4,719.2	-81.7	-76.1	-75.4	0.30	-0.20	1.80
4,750.0	6.99	253.49	4,744.0	-82.5	-79.0	-76.0	0.60	0.32	-4.20
4,775.0	7.04	253.07	4,768.8	-83.4	-81.9	-76.6	0.29	0.20	-1.68
4,800.0	7.14	253.76	4,793.7	-84.2	-84.9	-77.3	0.53	0.40	2.76
4,825.0	7.22	253.90	4,818.5	-85.1	-87.9	-77.9	0.33	0.32	0.56
4,850.0	7.27	254.60	4,843.3	-86.0	-90.9	-78.5	0.41	0.20	2.80
4,875.0	7.37	253.72	4,868.1	-86.8	-94.0	-79.1	0.60	0.40	-3.52
4,900.0	7.44	253.66	4,892.8	-87.7	-97.1	-79.8	0.28	0.28	-0.24
4,925.0	7.49	253.26	4,917.6	-88.7	-100.2	-80.5	0.29	0.20	-1.60
4,950.0	7.68	252.93	4,942.4	-89.6	-103.3	-81.2	0.78	0.76	-1.32
4,975.0	7.90	253.11	4,967.2	-90.6	-106.6	-81.9	0.89	0.88	0.72
5,000.0	8.19	252.38	4,991.9	-91.7	-109.9	-82.7	1.23	1.16	-2.92
5,025.0	8.28	252.76	5,016.7	-92.7	-113.3	-83.5	0.42	0.36	1.52
5,050.0	8.40	252.24	5,041.4	-93.8	-116.8	-84.3	0.57	0.48	-2.08
5,075.0	8.64	251.17	5,066.1	-95.0	-120.3	-85.2	1.15	0.96	-4.28
5,100.0	8.67	251.94	5,090.9	-96.2	-123.9	-86.1	0.48	0.12	3.08
5,125.0	8.94	252.87	5,115.6	-97.3	-127.5	-86.9	1.22	1.08	3.72
5,150.0	9.19	252.49	5,140.3	-98.5	-131.3	-87.8	1.03	1.00	-1.52
5,175.0	9.57	251.73	5,164.9	-99.8	-135.1	-88.7	1.60	1.52	-3.04
5,200.0	9.91	249.97	5,189.6	-101.1	-139.1	-89.8	1.81	1.36	-7.04
5,225.0	9.80	250.16	5,214.2	-102.6	-143.2	-91.0	0.46	-0.44	0.76
5,250.0	9.86	249.94	5,238.8	-104.1	-147.2	-92.1	0.28	0.24	-0.88
5,275.0	10.01	249.87	5,263.4	-105.5	-151.2	-93.2	0.60	0.60	-0.28
5,300.0	10.24	249.47	5,288.1	-107.1	-155.3	-94.4	0.96	0.92	-1.60
5,325.0	10.29	250.34	5,312.7	-108.6	-159.5	-95.6	0.65	0.20	3.48
5,350.0	10.64	249.13	5,337.2	-110.2	-163.8	-96.9	1.65	1.40	-4.84
5,375.0	10.94	248.84	5,361.8	-111.8	-168.2	-98.2	1.22	1.20	-1.16
5,400.0	11.47	248.93	5,386.3	-113.6	-172.7	-99.6	2.12	2.12	0.36
5,425.0	11.76	249.31	5,410.8	-115.4	-177.4	-101.0	1.20	1.16	1.52
5,450.0	11.96	250.31	5,435.3	-117.2	-182.2	-102.4	1.15	0.80	4.00
5,475.0	12.24	251.54	5,459.7	-118.9	-187.2	-103.7	1.52	1.12	4.92
5,500.0	12.44	253.60	5,484.1	-120.5	-192.3	-104.9	1.93	0.80	8.24
5,525.0	12.73	255.91	5,508.5	-121.9	-197.5	-105.9	2.32	1.16	9.24
5,550.0	12.62	259.43	5,532.9	-123.1	-202.9	-106.6	3.12	-0.44	14.08
5,575.0	12.48	262.23	5,557.3	-123.9	-208.2	-107.1	2.50	-0.56	11.20
5,600.0	12.36	264.71	5,581.8	-124.6	-213.6	-107.3	2.19	-0.48	9.92
5,625.0	12.07	267.98	5,606.2	-124.9	-218.9	-107.2	3.00	-1.16	13.08
5,650.0	12.31	268.70	5,630.6	-125.0	-224.1	-106.9	1.14	0.96	2.88
5,675.0	12.24	269.61	5,655.1	-125.1	-229.4	-106.6	0.82	-0.28	3.64
5,700.0	12.04	268.77	5,679.5	-125.2	-234.7	-106.2	1.07	-0.80	-3.36

Survey Report

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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)
5,725.0	12.04	269.07	5,703.9	-125.3	-239.9	-105.9	0.25	0.00	1.20
5,750.0	12.14	270.08	5,728.4	-125.3	-245.2	-105.6	0.94	0.40	4.04
5,775.0	11.91	269.84	5,752.8	-125.3	-250.4	-105.1	0.94	-0.92	-0.96
5,800.0	11.70	269.94	5,777.3	-125.4	-255.5	-104.7	0.84	-0.84	0.40
5,825.0	10.53	271.45	5,801.8	-125.3	-260.3	-104.3	4.82	-4.68	6.04
5,850.0	9.14	274.95	5,826.5	-125.1	-264.6	-103.7	6.05	-5.56	14.00
5,875.0	8.35	277.76	5,851.2	-124.7	-268.3	-103.0	3.59	-3.16	11.24
5,900.0	8.16	279.50	5,875.9	-124.1	-271.9	-102.2	1.26	-0.76	6.96
5,925.0	7.13	280.15	5,900.7	-123.5	-275.2	-101.4	4.13	-4.12	2.60
5,950.0	5.59	286.25	5,925.5	-122.9	-277.9	-100.6	6.72	-6.16	24.40
5,975.0	4.80	289.57	5,950.4	-122.2	-280.0	-99.7	3.38	-3.16	13.28
6,000.0	4.49	289.77	5,975.4	-121.6	-281.9	-98.9	1.24	-1.24	0.80
6,025.0	4.43	290.25	6,000.3	-120.9	-283.7	-98.1	0.28	-0.24	1.92
6,050.0	4.52	289.91	6,025.2	-120.2	-285.6	-97.3	0.38	0.36	-1.36
6,075.0	4.44	290.77	6,050.1	-119.5	-287.4	-96.4	0.42	-0.32	3.44
6,100.0	4.54	291.04	6,075.1	-118.8	-289.2	-95.6	0.41	0.40	1.08
6,125.0	4.54	290.17	6,100.0	-118.2	-291.1	-94.8	0.28	0.00	-3.48
6,150.0	4.49	288.25	6,124.9	-117.5	-292.9	-94.0	0.64	-0.20	-7.68
6,175.0	4.67	285.27	6,149.8	-116.9	-294.9	-93.2	1.19	0.72	-11.92
6,200.0	4.80	281.77	6,174.7	-116.4	-296.9	-92.6	1.27	0.52	-14.00
6,225.0	5.02	277.98	6,199.6	-116.1	-299.0	-92.1	1.57	0.88	-15.16
6,250.0	5.10	276.05	6,224.5	-115.8	-301.2	-91.6	0.75	0.32	-7.72
6,275.0	5.14	276.30	6,249.4	-115.6	-303.4	-91.2	0.18	0.16	1.00
6,300.0	5.06	275.91	6,274.3	-115.3	-305.6	-90.8	0.35	-0.32	-1.56
6,325.0	5.11	275.53	6,299.3	-115.1	-307.8	-90.4	0.24	0.20	-1.52
6,350.0	5.17	276.24	6,324.1	-114.9	-310.0	-90.0	0.35	0.24	2.84
6,375.0	4.66	268.44	6,349.1	-114.8	-312.2	-89.7	3.36	-2.04	-31.20
6,400.0	4.39	258.57	6,374.0	-115.0	-314.1	-89.8	3.29	-1.08	-39.48
6,425.0	4.39	250.49	6,398.9	-115.5	-315.9	-90.2	2.47	0.00	-32.32
6,450.0	4.39	248.35	6,423.8	-116.2	-317.7	-90.7	0.66	0.00	-8.56
6,475.0	4.26	246.00	6,448.8	-116.9	-319.5	-91.3	0.88	-0.52	-9.40
6,500.0	4.30	247.35	6,473.7	-117.7	-321.2	-91.9	0.43	0.16	5.40
6,525.0	4.28	247.36	6,498.6	-118.4	-322.9	-92.5	0.08	-0.08	0.04
6,550.0	4.37	245.42	6,523.6	-119.1	-324.6	-93.1	0.69	0.36	-7.76
6,575.0	4.25	242.53	6,548.5	-120.0	-326.3	-93.8	0.99	-0.48	-11.56
6,600.0	4.46	231.98	6,573.4	-121.0	-327.9	-94.7	3.31	0.84	-42.20
6,625.0	4.70	228.34	6,598.3	-122.3	-329.4	-95.8	1.51	0.96	-14.56
6,650.0	4.63	228.02	6,623.2	-123.6	-331.0	-97.0	0.30	-0.28	-1.28
6,675.0	4.69	228.45	6,648.2	-125.0	-332.5	-98.3	0.28	0.24	1.72
6,700.0	4.73	228.63	6,673.1	-126.3	-334.0	-99.5	0.17	0.16	0.72
6,725.0	4.66	231.23	6,698.0	-127.7	-335.6	-100.7	0.90	-0.28	10.40
6,750.0	4.47	223.82	6,722.9	-129.0	-337.1	-101.9	2.48	-0.76	-29.64
6,775.0	4.18	212.25	6,747.8	-130.5	-338.2	-103.3	3.67	-1.16	-46.28
6,800.0	4.08	200.41	6,772.8	-132.1	-339.0	-104.8	3.43	-0.40	-47.36

Survey Report

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MD Reference: RKB=3791.1+30 @ 3821.1usft (SCANQUEST)
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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)
6,825.0	4.06	196.11	6,797.7	-133.8	-339.6	-106.5	1.22	-0.08	-17.20
6,850.0	4.10	196.21	6,822.7	-135.5	-340.1	-108.1	0.16	0.16	0.40
6,875.0	4.04	198.01	6,847.6	-137.2	-340.6	-109.8	0.56	-0.24	7.20
6,900.0	4.10	196.85	6,872.5	-138.8	-341.1	-111.4	0.41	0.24	-4.64
6,925.0	4.17	195.63	6,897.5	-140.6	-341.6	-113.1	0.45	0.28	-4.88
6,950.0	4.17	188.65	6,922.4	-142.4	-342.0	-114.8	2.03	0.00	-27.92
6,975.0	4.45	174.22	6,947.3	-144.2	-342.0	-116.7	4.47	1.12	-57.72
7,000.0	4.55	171.61	6,972.3	-146.2	-341.8	-118.7	0.91	0.40	-10.44
7,025.0	4.65	171.11	6,997.2	-148.1	-341.5	-120.7	0.43	0.40	-2.00
7,050.0	4.62	171.38	7,022.1	-150.1	-341.2	-122.7	0.15	-0.12	1.08
7,075.0	4.58	171.91	7,047.0	-152.1	-340.9	-124.7	0.23	-0.16	2.12
7,100.0	4.54	170.89	7,071.9	-154.1	-340.6	-126.7	0.36	-0.16	-4.08
7,125.0	4.59	170.85	7,096.8	-156.1	-340.3	-128.6	0.20	0.20	-0.16
7,150.0	4.20	168.04	7,121.8	-157.9	-339.9	-130.5	1.78	-1.56	-11.24
7,175.0	3.84	161.05	7,146.7	-159.6	-339.5	-132.3	2.43	-1.44	-27.96
7,200.0	3.71	160.53	7,171.7	-161.2	-338.9	-133.9	0.54	-0.52	-2.08
7,225.0	3.59	159.95	7,196.6	-162.7	-338.4	-135.4	0.50	-0.48	-2.32
7,250.0	3.67	159.22	7,221.6	-164.2	-337.8	-136.9	0.37	0.32	-2.92
7,275.0	3.71	160.07	7,246.5	-165.7	-337.3	-138.5	0.27	0.16	3.40
7,300.0	3.63	160.48	7,271.5	-167.2	-336.7	-140.0	0.34	-0.32	1.64
7,325.0	3.51	159.83	7,296.4	-168.6	-336.2	-141.5	0.51	-0.48	-2.60
7,350.0	3.47	160.00	7,321.4	-170.1	-335.7	-143.0	0.17	-0.16	0.68
7,375.0	3.35	161.22	7,346.3	-171.5	-335.2	-144.4	0.56	-0.48	4.88
7,400.0	3.44	159.74	7,371.3	-172.9	-334.7	-145.8	0.50	0.36	-5.92
7,425.0	3.34	161.25	7,396.2	-174.3	-334.2	-147.3	0.54	-0.40	6.04
7,450.0	3.42	160.20	7,421.2	-175.7	-333.7	-148.7	0.40	0.32	-4.20
7,475.0	3.38	160.13	7,446.1	-177.0	-333.2	-150.1	0.16	-0.16	-0.28
7,500.0	3.43	161.00	7,471.1	-178.4	-332.7	-151.6	0.29	0.20	3.48
7,525.0	3.30	161.34	7,496.1	-179.8	-332.2	-153.0	0.53	-0.52	1.36
7,550.0	3.29	161.09	7,521.0	-181.2	-331.8	-154.4	0.07	-0.04	-1.00
7,575.0	3.23	161.38	7,546.0	-182.5	-331.3	-155.8	0.25	-0.24	1.16
7,600.0	3.23	162.57	7,570.9	-183.9	-330.9	-157.1	0.27	0.00	4.76
7,625.0	3.10	163.47	7,595.9	-185.2	-330.5	-158.5	0.56	-0.52	3.60
7,650.0	3.08	163.57	7,620.9	-186.5	-330.1	-159.8	0.08	-0.08	0.40
7,675.0	3.03	162.95	7,645.8	-187.8	-329.7	-161.1	0.24	-0.20	-2.48
7,700.0	2.89	166.18	7,670.8	-189.0	-329.4	-162.4	0.87	-0.56	12.92
7,725.0	2.68	164.11	7,695.8	-190.2	-329.1	-163.6	0.93	-0.84	-8.28
7,750.0	2.28	158.04	7,720.7	-191.2	-328.7	-164.6	1.91	-1.60	-24.28
7,775.0	1.96	155.15	7,745.7	-192.1	-328.4	-165.5	1.35	-1.28	-11.56
7,800.0	1.87	155.48	7,770.7	-192.8	-328.0	-166.3	0.36	-0.36	1.32
7,825.0	1.83	158.81	7,795.7	-193.6	-327.7	-167.0	0.43	-0.16	12.52
7,850.0	1.97	155.28	7,820.7	-194.3	-327.4	-167.8	0.71	0.56	-13.32
7,875.0	1.84	152.92	7,845.7	-195.1	-327.0	-168.6	0.61	-0.52	-9.44

Survey Report

Company: NORTHERN DELAWARE BASIN
Project: LEA COUNTY, NM
Site: ZEUS
Well: LITTLE BEAR FED COM #6H
Wellbore: OWB
Design: ACTUAL WELLPATH

Local Co-ordinate Reference: Well LITTLE BEAR FED COM #6H
TVD Reference: RKB=3791.1+30 @ 3821.1usft (SCANQUEST)
MD Reference: RKB=3791.1+30 @ 3821.1usft (SCANQUEST)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM_Users

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)
7,900.0	1.45	127.92	7,870.7	-195.6	-326.6	-169.2	3.23	-1.56	-100.00
7,925.0	1.29	87.46	7,895.6	-195.8	-326.0	-169.4	3.84	-0.64	-161.84
7,950.0	1.71	67.09	7,920.6	-195.6	-325.4	-169.3	2.69	1.68	-81.48
7,975.0	1.75	59.42	7,945.6	-195.3	-324.7	-169.0	0.94	0.16	-30.68
8,000.0	1.77	56.37	7,970.6	-194.9	-324.1	-168.6	0.38	0.08	-12.20
8,025.0	1.69	51.31	7,995.6	-194.5	-323.5	-168.3	0.69	-0.32	-20.24
8,050.0	1.63	53.07	8,020.6	-194.0	-322.9	-167.9	0.31	-0.24	7.04
8,075.0	1.69	53.38	8,045.6	-193.6	-322.3	-167.5	0.24	0.24	1.24
8,100.0	1.46	54.23	8,070.6	-193.2	-321.8	-167.1	0.92	-0.92	3.40
8,125.0	0.90	24.15	8,095.6	-192.8	-321.4	-166.8	3.27	-2.24	-120.32
8,150.0	0.53	8.62	8,120.6	-192.5	-321.3	-166.5	1.66	-1.48	-62.12
8,175.0	0.48	6.73	8,145.6	-192.3	-321.3	-166.3	0.21	-0.20	-7.56
8,200.0	0.48	18.32	8,170.6	-192.1	-321.3	-166.1	0.39	0.00	46.36
8,225.0	0.55	356.21	8,195.6	-191.9	-321.2	-165.9	0.84	0.28	-88.44
8,250.0	0.48	17.37	8,220.6	-191.7	-321.2	-165.6	0.80	-0.28	84.64
8,275.0	0.48	356.24	8,245.6	-191.4	-321.2	-165.4	0.70	0.00	-84.52
8,300.0	0.45	353.76	8,270.6	-191.2	-321.2	-165.2	0.14	-0.12	-9.92
8,325.0	0.50	339.35	8,295.6	-191.0	-321.3	-165.0	0.52	0.20	-57.64
8,350.0	0.42	340.88	8,320.6	-190.9	-321.3	-164.8	0.32	-0.32	6.12
8,375.0	0.35	338.13	8,345.6	-190.7	-321.4	-164.7	0.29	-0.28	-11.00
8,400.0	0.30	351.17	8,370.6	-190.6	-321.4	-164.5	0.36	-0.20	52.16
8,425.0	0.33	343.92	8,395.6	-190.4	-321.5	-164.4	0.20	0.12	-29.00
8,450.0	0.28	339.08	8,420.6	-190.3	-321.5	-164.3	0.22	-0.20	-19.36
8,475.0	0.31	312.01	8,445.6	-190.2	-321.6	-164.2	0.56	0.12	-108.28
8,500.0	0.24	318.29	8,470.6	-190.1	-321.7	-164.1	0.30	-0.28	25.12
8,525.0	0.14	304.78	8,495.6	-190.1	-321.7	-164.0	0.44	-0.40	-54.04
8,550.0	0.17	314.27	8,520.6	-190.0	-321.8	-164.0	0.16	0.12	37.96
8,575.0	0.09	294.49	8,545.6	-190.0	-321.8	-163.9	0.36	-0.32	-79.12
8,600.0	0.25	323.12	8,570.6	-189.9	-321.9	-163.9	0.71	0.64	114.52
8,625.0	0.22	323.78	8,595.6	-189.8	-321.9	-163.8	0.12	-0.12	2.64
8,650.0	0.07	307.92	8,620.6	-189.8	-322.0	-163.7	0.62	-0.60	-63.44
8,675.0	0.20	252.66	8,645.6	-189.8	-322.0	-163.7	0.68	0.52	-221.04
8,700.0	0.21	237.40	8,670.6	-189.8	-322.1	-163.8	0.22	0.04	-61.04
8,725.0	0.28	221.28	8,695.6	-189.9	-322.2	-163.8	0.39	0.28	-64.48
8,750.0	0.26	228.47	8,720.6	-190.0	-322.3	-163.9	0.16	-0.08	28.76
8,775.0	0.35	239.44	8,745.6	-190.1	-322.4	-164.0	0.43	0.36	43.88
8,800.0	0.35	240.53	8,770.6	-190.1	-322.5	-164.0	0.03	0.00	4.36
8,825.0	0.35	229.97	8,795.6	-190.2	-322.6	-164.1	0.26	0.00	-42.24
8,850.0	0.26	230.12	8,820.6	-190.3	-322.7	-164.2	0.36	-0.36	0.60
8,875.0	0.29	217.21	8,845.6	-190.4	-322.8	-164.3	0.27	0.12	-51.64
8,900.0	0.35	231.89	8,870.6	-190.5	-322.9	-164.4	0.40	0.24	58.72
8,925.0	0.33	223.86	8,895.6	-190.6	-323.0	-164.5	0.21	-0.08	-32.12
8,950.0	0.27	217.59	8,920.6	-190.7	-323.1	-164.5	0.27	-0.24	-25.08

Survey Report

Company: NORTHERN DELAWARE BASIN
Project: LEA COUNTY, NM
Site: ZEUS
Well: LITTLE BEAR FED COM #6H
Wellbore: OWB
Design: ACTUAL WELLPATH

Local Co-ordinate Reference: Well LITTLE BEAR FED COM #6H
TVD Reference: RKB=3791.1+30 @ 3821.1usft (SCANQUEST)
MD Reference: RKB=3791.1+30 @ 3821.1usft (SCANQUEST)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM_Users

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)
8,975.0	0.28	216.46	8,945.6	-190.8	-323.2	-164.6	0.05	0.04	-4.52
9,000.0	0.25	206.46	8,970.6	-190.9	-323.2	-164.7	0.22	-0.12	-40.00
9,025.0	0.29	217.93	8,995.6	-191.0	-323.3	-164.8	0.27	0.16	45.88
9,050.0	0.33	185.87	9,020.6	-191.1	-323.3	-164.9	0.70	0.16	-128.24
9,075.0	0.28	178.50	9,045.6	-191.3	-323.4	-165.1	0.25	-0.20	-29.48
9,100.0	0.32	185.13	9,070.6	-191.4	-323.4	-165.2	0.21	0.16	26.52
9,125.0	0.28	179.53	9,095.6	-191.5	-323.4	-165.3	0.20	-0.16	-22.40
9,150.0	0.30	177.63	9,120.6	-191.6	-323.4	-165.5	0.09	0.08	-7.60
9,175.0	0.20	196.97	9,145.6	-191.7	-323.4	-165.6	0.52	-0.40	77.36
9,200.0	0.36	218.79	9,170.6	-191.8	-323.4	-165.7	0.76	0.64	87.28
9,225.0	0.41	205.28	9,195.6	-192.0	-323.5	-165.8	0.41	0.20	-54.04
9,250.0	0.41	213.75	9,220.6	-192.1	-323.6	-165.9	0.24	0.00	33.88
9,275.0	0.41	204.48	9,245.5	-192.3	-323.7	-166.1	0.27	0.00	-37.08
9,300.0	0.53	220.59	9,270.5	-192.5	-323.8	-166.2	0.71	0.48	64.44
9,325.0	0.53	225.37	9,295.5	-192.6	-324.0	-166.4	0.18	0.00	19.12
9,350.0	0.53	218.59	9,320.5	-192.8	-324.1	-166.6	0.25	0.00	-27.12
9,375.0	0.61	230.55	9,345.5	-193.0	-324.3	-166.7	0.57	0.32	47.84
9,400.0	0.66	228.36	9,370.5	-193.2	-324.5	-166.9	0.22	0.20	-8.76
9,425.0	0.63	226.09	9,395.5	-193.4	-324.7	-167.1	0.16	-0.12	-9.08
9,450.0	0.61	228.33	9,420.5	-193.5	-324.9	-167.2	0.13	-0.08	8.96
9,475.0	0.67	228.83	9,445.5	-193.7	-325.1	-167.4	0.24	0.24	2.00
9,500.0	0.64	229.65	9,470.5	-193.9	-325.3	-167.6	0.13	-0.12	3.28
9,525.0	0.68	232.68	9,495.5	-194.1	-325.6	-167.7	0.21	0.16	12.12
9,550.0	0.60	231.68	9,520.5	-194.3	-325.8	-167.9	0.32	-0.32	-4.00
9,575.0	0.63	228.99	9,545.5	-194.4	-326.0	-168.0	0.17	0.12	-10.76
9,600.0	0.62	237.49	9,570.5	-194.6	-326.2	-168.2	0.37	-0.04	34.00
9,625.0	0.53	224.80	9,595.5	-194.8	-326.4	-168.3	0.62	-0.36	-50.76
9,650.0	0.52	230.93	9,620.5	-194.9	-326.6	-168.5	0.23	-0.04	24.52
9,675.0	0.40	232.07	9,645.5	-195.0	-326.7	-168.6	0.48	-0.48	4.56
9,700.0	0.24	223.54	9,670.5	-195.1	-326.8	-168.7	0.67	-0.64	-34.12
9,725.0	0.24	228.65	9,695.5	-195.2	-326.9	-168.7	0.09	0.00	20.44
9,750.0	0.33	280.82	9,720.5	-195.2	-327.0	-168.7	1.05	0.36	208.68
9,775.0	0.36	281.18	9,745.5	-195.2	-327.2	-168.7	0.12	0.12	1.44
9,800.0	0.30	266.34	9,770.5	-195.2	-327.3	-168.7	0.42	-0.24	-59.36
9,825.0	0.25	258.03	9,795.5	-195.2	-327.4	-168.7	0.26	-0.20	-33.24
9,850.0	0.15	288.96	9,820.5	-195.2	-327.5	-168.7	0.58	-0.40	123.72
9,875.0	0.29	304.11	9,845.5	-195.1	-327.6	-168.6	0.60	0.56	60.60
9,900.0	0.41	303.01	9,870.5	-195.1	-327.7	-168.5	0.48	0.48	-4.40
9,925.0	0.23	282.15	9,895.5	-195.0	-327.8	-168.5	0.85	-0.72	-83.44
9,950.0	0.25	285.83	9,920.5	-195.0	-327.9	-168.4	0.10	0.08	14.72
9,975.0	0.28	297.71	9,945.5	-194.9	-328.1	-168.4	0.25	0.12	47.52
10,000.0	0.13	292.89	9,970.5	-194.9	-328.1	-168.3	0.60	-0.60	-19.28
10,025.0	0.38	310.41	9,995.5	-194.8	-328.2	-168.3	1.04	1.00	70.08
10,050.0	0.32	297.86	10,020.5	-194.7	-328.3	-168.2	0.39	-0.24	-50.20

Survey Report

Company: NORTHERN DELAWARE BASIN
Project: LEA COUNTY, NM
Site: ZEUS
Well: LITTLE BEAR FED COM #6H
Wellbore: OWB
Design: ACTUAL WELLPATH

Local Co-ordinate Reference: Well LITTLE BEAR FED COM #6H
TVD Reference: RKB=3791.1+30 @ 3821.1usft (SCANQUEST)
MD Reference: RKB=3791.1+30 @ 3821.1usft (SCANQUEST)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM_Users

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)
10,075.0	0.37	283.93	10,045.5	-194.7	-328.5	-168.1	0.39	0.20	-55.72
10,100.0	0.27	262.47	10,070.5	-194.7	-328.6	-168.1	0.62	-0.40	-85.84
10,125.0	0.25	256.71	10,095.5	-194.7	-328.7	-168.1	0.13	-0.08	-23.04
10,150.0	0.30	260.00	10,120.5	-194.7	-328.9	-168.1	0.21	0.20	13.16
10,175.0	0.26	272.70	10,145.5	-194.7	-329.0	-168.1	0.29	-0.16	50.80
10,200.0	0.19	279.78	10,170.5	-194.7	-329.1	-168.1	0.30	-0.28	28.32
10,225.0	0.21	274.29	10,195.5	-194.7	-329.2	-168.1	0.11	0.08	-21.96
10,250.0	0.38	321.91	10,220.5	-194.6	-329.3	-168.0	1.14	0.68	190.48
10,275.0	0.57	276.40	10,245.5	-194.6	-329.4	-167.9	1.63	0.76	-182.04
10,300.0	0.66	282.15	10,270.5	-194.5	-329.7	-167.8	0.44	0.36	23.00
10,325.0	0.75	267.66	10,295.5	-194.5	-330.0	-167.8	0.80	0.36	-57.96
10,350.0	0.76	265.61	10,320.5	-194.5	-330.3	-167.8	0.12	0.04	-8.20
10,375.0	0.82	281.46	10,345.5	-194.5	-330.7	-167.7	0.90	0.24	63.40
10,400.0	0.92	276.17	10,370.5	-194.4	-331.0	-167.6	0.51	0.40	-21.16
10,425.0	1.14	277.68	10,395.5	-194.4	-331.5	-167.5	0.89	0.88	6.04
10,450.0	1.11	275.82	10,420.5	-194.3	-332.0	-167.5	0.19	-0.12	-7.44
10,475.0	1.06	271.83	10,445.5	-194.3	-332.4	-167.4	0.36	-0.20	-15.96
10,500.0	1.12	276.44	10,470.5	-194.3	-332.9	-167.3	0.42	0.24	18.44
10,525.0	1.16	276.63	10,495.5	-194.2	-333.4	-167.2	0.16	0.16	0.76
10,550.0	1.35	273.30	10,520.5	-194.2	-334.0	-167.1	0.81	0.76	-13.32
10,575.0	1.35	275.06	10,545.5	-194.1	-334.5	-167.0	0.17	0.00	7.04
10,600.0	0.90	276.58	10,570.5	-194.1	-335.0	-166.9	1.80	-1.80	6.08
10,625.0	0.83	289.29	10,595.5	-194.0	-335.4	-166.8	0.81	-0.28	50.84
10,650.0	0.63	313.48	10,620.5	-193.8	-335.7	-166.7	1.45	-0.80	96.76
10,675.0	0.65	319.46	10,645.5	-193.6	-335.9	-166.4	0.28	0.08	23.92
10,700.0	0.61	324.95	10,670.5	-193.4	-336.0	-166.2	0.29	-0.16	21.96
10,725.0	0.51	348.52	10,695.5	-193.2	-336.1	-166.0	1.00	-0.40	94.28
10,750.0	0.54	317.15	10,720.5	-193.0	-336.2	-165.8	1.14	0.12	-125.48
10,775.0	0.15	323.29	10,745.5	-192.9	-336.3	-165.7	1.56	-1.56	24.56
10,800.0	0.22	140.71	10,770.5	-192.9	-336.3	-165.7	1.48	0.28	709.68
10,895.0	1.14	168.62	10,865.5	-194.0	-336.0	-166.8	1.00	0.97	29.38
11,005.0	0.97	155.62	10,975.4	-195.9	-335.4	-168.7	0.27	-0.15	-11.82
11,036.0	0.80	138.36	11,006.4	-196.3	-335.2	-169.1	1.01	-0.55	-55.68
11,067.0	2.54	6.02	11,037.4	-195.8	-335.0	-168.6	10.11	5.61	-426.90
11,098.0	5.39	10.13	11,068.3	-193.6	-334.6	-166.6	9.23	9.19	13.26
11,130.0	7.30	9.31	11,100.1	-190.2	-334.0	-163.1	5.98	5.97	-2.56
11,162.0	11.53	1.94	11,131.7	-185.0	-333.6	-158.0	13.72	13.22	-23.03
11,193.0	13.25	0.36	11,162.0	-178.3	-333.5	-151.4	5.65	5.55	-5.10
11,225.0	14.54	359.91	11,193.0	-170.6	-333.4	-143.7	4.05	4.03	-1.41
11,256.0	18.51	358.76	11,222.8	-161.8	-333.6	-134.9	12.85	12.81	-3.71
11,288.0	22.57	354.03	11,252.7	-150.6	-334.3	-123.7	13.70	12.69	-14.78
11,319.0	27.07	350.18	11,280.9	-137.7	-336.1	-110.7	15.42	14.52	-12.42
11,351.0	33.29	350.03	11,308.5	-121.9	-338.9	-94.7	19.44	19.44	-0.47

Survey Report

Company: NORTHERN DELAWARE BASIN
Project: LEA COUNTY, NM
Site: ZEUS
Well: LITTLE BEAR FED COM #6H
Wellbore: OWB
Design: ACTUAL WELLPATH

Local Co-ordinate Reference: Well LITTLE BEAR FED COM #6H
TVD Reference: RKB=3791.1+30 @ 3821.1usft (SCANQUEST)
MD Reference: RKB=3791.1+30 @ 3821.1usft (SCANQUEST)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM_Users

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)
11,382.0	37.98	352.67	11,333.7	-104.0	-341.6	-76.7	15.92	15.13	8.52
11,413.0	40.51	352.80	11,357.7	-84.6	-344.1	-57.1	8.17	8.16	0.42
11,460.0	43.19	353.71	11,392.7	-53.5	-347.7	-25.8	5.85	5.70	1.94
11,507.0	47.01	355.77	11,425.9	-20.3	-350.8	7.5	8.70	8.13	4.38
11,554.0	47.82	355.66	11,457.7	14.2	-353.4	42.1	1.73	1.72	-0.23
11,602.0	52.44	359.10	11,488.4	51.0	-355.0	78.9	11.08	9.63	7.17
11,649.0	51.91	0.99	11,517.3	88.1	-355.0	115.9	3.37	-1.13	4.02
11,698.0	53.02	1.81	11,547.1	126.9	-354.0	154.6	2.63	2.27	1.67
11,730.0	56.34	4.67	11,565.6	153.0	-352.5	180.4	12.68	10.38	8.94
11,761.0	64.00	7.57	11,581.0	179.7	-349.7	206.8	26.00	24.71	9.35
11,792.0	72.33	8.71	11,592.6	208.2	-345.6	234.9	27.09	26.87	3.68
11,823.0	81.43	8.63	11,599.6	238.0	-341.0	264.2	29.36	29.35	-0.26
11,912.0	93.56	3.08	11,603.5	326.2	-332.0	351.5	14.98	13.63	-6.24
12,006.0	91.65	359.92	11,599.2	420.1	-329.5	444.9	3.92	-2.03	-3.36
12,101.0	91.85	358.69	11,596.3	515.0	-330.7	539.6	1.31	0.21	-1.29
12,195.0	93.53	357.72	11,591.9	608.9	-333.6	633.4	2.06	1.79	-1.03
12,288.0	94.63	356.86	11,585.3	701.5	-338.0	726.1	1.50	1.18	-0.92
12,382.0	93.61	0.36	11,578.5	795.3	-340.3	819.7	3.87	-1.09	3.72
12,477.0	92.83	358.85	11,573.2	890.1	-340.9	914.3	1.79	-0.82	-1.59
12,572.0	89.05	0.59	11,571.6	985.1	-341.4	1,009.0	4.38	-3.98	1.83
12,667.0	90.59	1.48	11,571.9	1,080.1	-339.7	1,103.5	1.87	1.62	0.94
12,760.0	87.62	359.54	11,573.4	1,173.0	-338.9	1,196.2	3.81	-3.19	-2.09
12,854.0	87.98	358.36	11,577.0	1,266.9	-340.6	1,289.9	1.31	0.38	-1.26
12,948.0	90.06	357.35	11,578.6	1,360.8	-344.1	1,383.8	2.46	2.21	-1.07
13,043.0	90.31	356.10	11,578.3	1,455.7	-349.5	1,478.8	1.34	0.26	-1.32
13,137.0	92.18	358.67	11,576.2	1,549.6	-353.8	1,572.7	3.38	1.99	2.73
13,231.0	92.07	358.90	11,572.8	1,643.5	-355.8	1,666.5	0.27	-0.12	0.24
13,325.0	89.72	359.99	11,571.3	1,737.4	-356.7	1,760.2	2.76	-2.50	1.16
13,420.0	90.03	358.93	11,571.5	1,832.4	-357.6	1,855.0	1.16	0.33	-1.12
13,514.0	88.52	359.79	11,572.7	1,926.4	-358.7	1,948.8	1.85	-1.61	0.91
13,607.0	89.22	359.92	11,574.5	2,019.4	-358.9	2,041.5	0.77	0.75	0.14
13,702.0	91.12	358.70	11,574.2	2,114.4	-360.0	2,136.3	2.38	2.00	-1.28
13,797.0	89.13	359.18	11,574.0	2,209.4	-361.8	2,231.1	2.15	-2.09	0.51
13,889.0	90.11	2.43	11,574.6	2,301.3	-360.5	2,322.7	3.69	1.07	3.53
13,982.0	91.88	4.06	11,573.0	2,394.2	-355.2	2,414.8	2.59	1.90	1.75
14,076.0	89.94	5.10	11,571.5	2,487.9	-347.7	2,507.6	2.34	-2.06	1.11
14,169.0	90.67	1.83	11,571.0	2,580.7	-342.1	2,599.7	3.60	0.78	-3.52
14,262.0	90.84	1.67	11,569.8	2,673.6	-339.3	2,692.1	0.25	0.18	-0.17
14,355.0	90.06	358.88	11,569.1	2,766.6	-338.8	2,784.7	3.11	-0.84	-3.00
14,449.0	90.78	357.80	11,568.4	2,860.6	-341.6	2,878.6	1.38	0.77	-1.15
14,541.0	90.00	357.03	11,567.8	2,952.5	-345.7	2,970.6	1.19	-0.85	-0.84
14,635.0	92.04	358.60	11,566.1	3,046.4	-349.3	3,064.5	2.74	2.17	1.67
14,728.0	91.32	0.04	11,563.4	3,139.3	-350.4	3,157.2	1.73	-0.77	1.55

Survey Report

Company: NORTHERN DELAWARE BASIN
Project: LEA COUNTY, NM
Site: ZEUS
Well: LITTLE BEAR FED COM #6H
Wellbore: OWB
Design: ACTUAL WELLPATH

Local Co-ordinate Reference: Well LITTLE BEAR FED COM #6H
TVD Reference: RKB=3791.1+30 @ 3821.1usft (SCANQUEST)
MD Reference: RKB=3791.1+30 @ 3821.1usft (SCANQUEST)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM_Users

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)
14,821.0	92.16	0.37	11,560.5	3,232.3	-350.1	3,249.8	0.97	0.90	0.35
14,915.0	90.76	359.53	11,558.1	3,326.2	-350.1	3,343.5	1.74	-1.49	-0.89
15,009.0	91.65	359.34	11,556.2	3,420.2	-351.1	3,437.3	0.97	0.95	-0.20
15,104.0	89.13	359.86	11,555.5	3,515.2	-351.7	3,532.0	2.71	-2.65	0.55
15,198.0	89.44	358.50	11,556.7	3,609.2	-353.1	3,625.8	1.48	0.33	-1.45
15,292.0	90.98	358.85	11,556.3	3,703.2	-355.3	3,719.7	1.68	-1.64	0.37
15,386.0	88.88	359.70	11,556.5	3,797.1	-356.4	3,813.4	2.41	-2.23	0.90
15,479.0	88.99	359.09	11,558.2	3,890.1	-357.4	3,906.2	0.67	0.12	-0.66
15,574.0	90.81	359.21	11,558.4	3,985.1	-358.8	4,001.0	1.92	1.92	0.13
15,669.0	89.47	357.41	11,558.1	4,080.1	-361.6	4,095.9	2.36	-1.41	-1.89
15,763.0	89.78	354.52	11,558.7	4,173.8	-368.2	4,189.9	3.09	0.33	-3.07
15,858.0	89.47	358.29	11,559.4	4,268.6	-374.2	4,284.8	3.98	-0.33	3.97
15,953.0	91.51	0.35	11,558.5	4,363.6	-375.3	4,379.6	3.05	2.15	2.17
16,047.0	92.76	357.44	11,555.0	4,457.5	-377.1	4,473.4	3.37	1.33	-3.10
16,141.0	90.08	0.43	11,552.7	4,551.4	-378.9	4,567.1	4.27	-2.85	3.18
16,215.0	89.69	358.46	11,552.9	4,625.4	-379.6	4,641.0	2.71	-0.53	-2.66
16,280.0	89.69	358.46	11,553.2	4,690.4	-381.3	4,705.9	0.00	0.00	0.00

Checked By: _____ **Approved By:** _____ **Date:** _____

	Distance Between Perfs			Distance Between Perfs			Distance Between Perfs			Distance Between Perfs			Distance Between Perfs		
	Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots	
From Bottom to Top	16,194	22	5	16,004	35	5	15,815	31	5	15,615	38	5	15,424	36	5
	16,172	22	5	15,990	20	5	15,802	28	5	15,805	24	5	15,412	25	5
	16,150	22	4	15,970	25	4	15,774	28	4	15,581	25	4	15,387	24	4
	16,128	22	4	15,945	27	4	15,746	21	4	15,556	28	4	15,363	24	4
	16,106	23	3	15,918	18	3	15,725		3	15,528	20	3	15,339	22	3
	16,083	22	3	15,900	30	3	15,701	24	3	15,508	24	3	15,317	26	3
	16,061	22	3	15,870	24	3	15,677	24	3	15,484	24	3	15,291	28	3
	16,039		3	15,846		3	15,653		3	15,460		3	15,263		3
Plug to Plug	91	30	Plug to Plug	69	30	Plug to Plug	79	30	Plug to Plug	76	30	Plug to Plug	71	30	
Frac Plug	16,219	Total Shots	Frac Plug	16,014	Total Shots	Frac Plug	15,825	Total Shots	Frac Plug	15,632	Total Shots	Frac Plug	15,434	Total Shots	

	Distance Between Perfs			Distance Between Perfs			Distance Between Perfs			Distance Between Perfs			Distance Between Perfs		
	Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots	
From Bottom to Top	15,235	28	5	15,042	32	5	14,849	32	5	14,660	37	5	14,452	48	5
	15,217	23	5	15,026	19	5	14,833	25	5	14,639	24	5	14,438	16	5
	15,194	24	4	15,007	30	4	14,808	23	4	14,615	24	4	14,422	24	4
	15,170	24	4	14,977	25	4	14,785	25	4	14,591	24	4	14,398	24	4
	15,146	24	3	14,952	23	3	14,760	19	3	14,567	24	3	14,374	24	3
	15,122	24	3	14,929	24	3	14,741	29	3	14,543	19	3	14,350	24	3
	15,098	24	3	14,905	24	3	14,712	15	3	14,524	24	3	14,326	24	3
	15,074		3	14,881		3	14,697		3	14,500		3	14,302		3
Plug to Plug	75	30	Plug to Plug	80	30	Plug to Plug	74	30	Plug to Plug	79	30	Plug to Plug	64	30	
Frac Plug	15,245	Total Shots	Frac Plug	15,057	Total Shots	Frac Plug	14,859	Total Shots	Frac Plug	14,670	Total Shots	Frac Plug	14,462	Total Shots	

	Distance Between Perfs			Distance Between Perfs			Distance Between Perfs			Distance Between Perfs			Distance Between Perfs		
	Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots	
From Bottom to Top	14,272	30	5	14,080	29	5	13,880	36	5	13,698	30	5	13,495	34	5
	14,255	26	5	14,060	24	5	13,867	24	5	13,673	23	5	13,481	20	5
	14,229	20	4	14,036	24	4	13,843	24	4	13,650	24	4	13,461	28	4
	14,209	28	4	14,012	28	4	13,819	24	4	13,626	24	4	13,433	28	4
	14,181	27	3	13,984	20	3	13,795	23	3	13,602	24	3	13,405	20	3
	14,154	21	3	13,964	24	3	13,772	25	3	13,578	24	3	13,385	25	3
	14,133	24	3	13,940	24	3	13,747	19	3	13,554	25	3	13,360	24	3
	14,109		3	13,916		3	13,728		3	13,529		3	13,336		3
Plug to Plug	73	30	Plug to Plug	78	30	Plug to Plug	71	30	Plug to Plug	82	30	Plug to Plug	77	30	
Frac Plug	14,282	Total Shots	Frac Plug	14,090	Total Shots	Frac Plug	13,890	Total Shots	Frac Plug	13,708	Total Shots	Frac Plug	13,510	Total Shots	

	Distance Between Perfs			Distance Between Perfs			Distance Between Perfs			Distance Between Perfs			Distance Between Perfs		
	Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots	
From Bottom to Top	13,300	36	5	13,120	30	5	12,910	40	5	12,728	30	5	12,525	39	5
	13,288	24	5	13,095	24	5	12,902	24	5	12,714	29	5	12,516	24	5
	13,264	24	4	13,071	24	4	12,878	24	4	12,685	26	4	12,492	24	4
	13,240	24	4	13,047	24	4	12,854	24	4	12,659	22	4	12,468	29	4
	13,216	24	3	13,023	24	3	12,830	24	3	12,637	24	3	12,439	19	3
	13,192	24	3	12,999	30	3	12,806	25	3	12,613	25	3	12,420	25	3
	13,168	18	3	12,969	19	3	12,781	23	3	12,588	24	3	12,395	24	3
	13,150		3	12,950		3	12,758		3	12,564		3	12,371		3
Plug to Plug	70	30	Plug to Plug	83	30	Plug to Plug	66	30	Plug to Plug	79	30	Plug to Plug	74	30	
Frac Plug	13,310	Total Shots	Frac Plug	13,130	Total Shots	Frac Plug	12,920	Total Shots	Frac Plug	12,738	Total Shots	Frac Plug	12,542	Total Shots	

	Distance Between Perfs			Distance Between Perfs			Distance Between Perfs			Stage 24	Distance Between Perfs			Stage 25	Distance Between Perfs		
	Distance Between Perfs	Shots		Distance Between Perfs	Shots		Distance Between Perfs	Shots			Distance Between Perfs	Shots			Distance Between Perfs	Shots	
From Bottom to Top	12,335	36	5	12,145	30	5	11,951	39	5		11792				0		
	12,323	24	5	12,130	24	5	11,937	28	5								
	12,299	24	4	12,106	24	4	11,909	20	4								
	12,275	24	4	12,082	24	4	11,889	24	4								
	12,251	21	3	12,058	25	3	11,865	25	3								
	12,230	28	3	12,033	24	3	11,840	24	3								
	12,202	27	3	12,009	19	3	11,816	24	3								
	12,175		3	11,990		3	11,792		3								
Plug to Plug	70	30	Plug to Plug	73	30	Plug to Plug	79	30	Plug to Plug	0	0	Plug to Plug	0	0	Plug to Plug	0	0
Frac Plug	12,345	Total Shots	Frac Plug	12,155	Total Shots	Frac Plug	11,968	Total Shots	Frac Plug		Total Shots	Frac Plug		Total Shots	Frac Plug		Total Shots

Little Bear Federal Com #6H

<u>Perfs</u>	<u>7 1/2% Acid (Gal)</u>	<u>Sand (#)</u>	<u>Fluid (Gal)</u>
1	1512	401738	319284
2	1512	397323	386988
3	1512	397302	343434
4	1512	402008	334110
5	1512	400521	362838
6	1512	401896	362628
7	1512	401641	364098
8	1512	400574	339192
9	1512	401063	350952
10	1512	400158	333228
11	1512	401338	334782
12	1512	402263	327516
13	1512	401186	332262
14	1512	402068	333732
15	1554	404454	332682
16	1512	404703	330036
17	1512	399160	330288
18	1512	400287	332556
19	1512	400789	332976
20	1512	400640	326886
21	1512	400059	329112
22	1512	399533	329490
23	1512	401590	330162
Totals	34,818	9,222,294	7,799,232