

(April 2004)

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

OMB NO. 1004-0137
Expires March 31, 2007

Month-Year
FEB 16 2007
OCD-ARTESIA, NM

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

PARALLEL PETROLEUM CORPORATION

3a. Address

1004 N BIG SPRING, SUITE 400, MIDLAND TX 79701

3b. Phone No. (include area code)

432-685-6563

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SL: 818 FSL & 459 FEL

ACTUAL: PP: 848 FSL & 708 FEL SEC 4, TS 19S, R21E

BHL: 913 FSL & 700 FWL

5. Lease Serial No.

NM NM 108921

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

DUKE 4 FEDERAL

8. Well Name and No.

2

9. API Well No.

30-015-35120 35246 pin

10. Field and Pool, or Exploratory Area

WOLF CAMP

11. County or Parish, State

EDDY

NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ Notice of Intent
☒ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- | | | | |
|---|---|--|--|
| ☐ Acidize | ☐ Deepen | ☐ Production (Start/Resume) | ☐ Water Shut-Off |
| ☐ Alter Casing | ☐ Fracture Treat | ☐ Reclamation | ☐ Well Integrity |
| ☐ Casing Repair | ☐ New Construction | ☐ Recomplete | ☒ Other TD, 5.5 CSG, |
| ☐ Change Plans | ☐ Plug and Abandon | ☐ Temporarily Abandon | GYRO SURVEY, MAD |
| ☐ Convert to Injection | ☐ Plug Back | ☐ Water Disposal | SURVEY, LOG |

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

01-25-2007:

REACHED TD @ 8224 MD

01-27-2007:

RUN 5.5 CSG IN 7.875 HOLE, 17# SET @ 8224.

LEAD W/500 SX 50/50/10 C + 0.2% FL-52A +0.2% SMS, 11.6 PPG, 2.43 YLD,

TAIL W/700 SX H + 0.6% BAIO + 0.4% CD32 + 1% FL62 + 0.1% ASA-301 + 0.4%

SMS, 15.6 PPG, 1.42 YLD, 123 CENTRALIZERS

TOC: 800 FT, BY TEMP SURVEY, ATTACHED

WOC: 11.5 HR, TEST CSG TO 1500 PSI FOR 30 MIN

ATTACHED IS GYRODATA GYRO SURVEY, SCHLUMBERGER MAD DIRECTIONAL SURVEY AND
OPEN HOLE LOG

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

KAYE MC CORMICK

Title

SR PROD & REG TECH

Date 02-06-2007

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Office

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

ACCEPTED FOR RECORD

Date

FEB 13 2007

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Accepted for record - NMOCD

FREDERICK WRIGHT
PETROLEUM ENGINEER

2/19/07

Keltic Services, Inc

Box 1857
Artesia, NM
88211

505 748 3759

Temperature Survey

Company	PARLLEL PETROLEUM CORP.	Date	01/27/07
Well	DUKE 4 FEDERAL #2	Time Plug Down	1430 hrs
		Time Start Survey	1230 hrs
		Time End Survey	130 hrs
Casing String COMPLEATION		Depth Reached	2000 ft
Cement Top	800 ft.		
Gauge	205		
Operator:	Julian	Witness:	RICK POINDEXTER

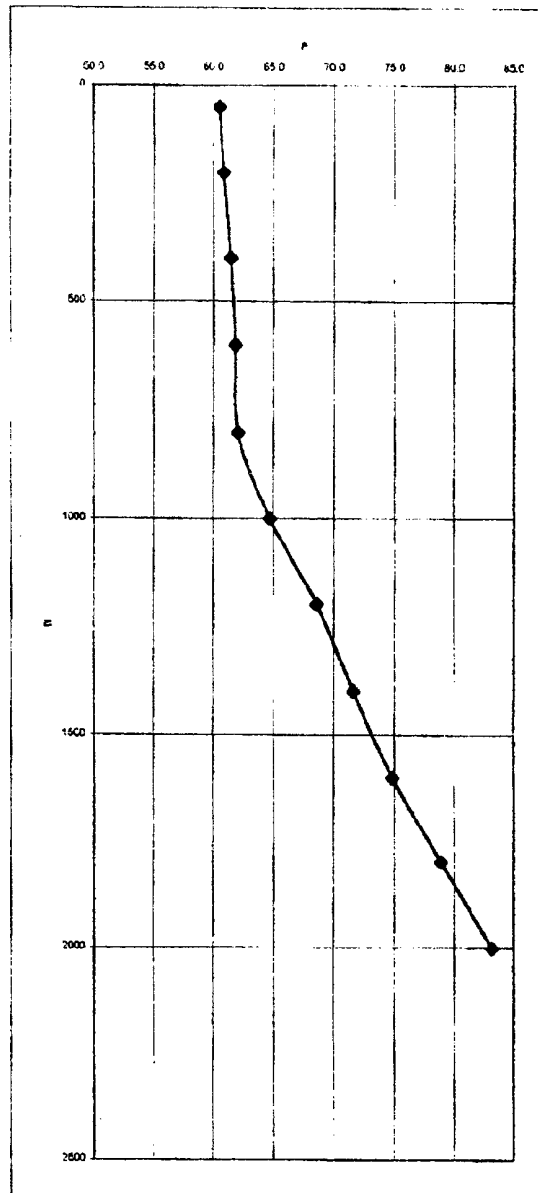
Keltic Services Inc
Temperature Survey

Company PARLEL PETROLEUM CORP.
Well DUKE 4 FEDERAL #2

Date 1/27/07
Plug Down 1430 hrs
Survey Start 1230 hrs
Operator Julian

Cement Top 800 ft

Depth ft	Temp. °F	Comments
50	60.5	
200	60.9	
400	61.5	
500	61.8	
800	62.1	CT
1000	64.7	
1200	68.6	
1400	71.6	
1600	74.8	
1800	78.9	
2000	83.2	



A Gyrodata Directional Survey

Field Copy Only, not definitive

for

PARALLEL PETROLEUM

Location: PATRIOT #1, EDDY COUNTY, NEW MEXICO

Lease: DUKE FED Well: #2, 4-1/2" DRILLPIPE

Job Number: MD0107G_105

Run Date: 1/15/2007 3:59:19 PM

Surveyor: AJ EATON

Calculation Method: MINIMUM CURVATURE

Survey Latitude: 32.685360 deg. N Longitude: 104.792600 deg. W

Azimuth Correction:

Gyro: 0.25000 deg East to Grid North

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Horizontal Coordinates Calculated from Well Head Location

A Gyrodata Directional Survey

PARALLEL PETROLEUM

Location: PATRIOT #1, EDDY COUNTY, NEW MEXICO

Lease: DUKE FED Well: #2, 4-1/2" DRILLPIPE

Job Number: MD0107G_105

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
0.00	0.00	0.00	0.00	0.00	0.0 0.0	0.00 N 0.00 E

0 TO 4468 FT. RATE GYROSCOPIC MULTISHOT DROP SURVEY RUN INSIDE 4-1/2" DRILLPIPE						
ALL MEASURED DEPTHS AND COORDINATES REFERENCED TO PATRIOT #1 R.K.B.						

100.00	0.12	228.54	0.12	100.00	0.1 228.5	0.07 S 0.08 W
200.00	0.08	354.40	0.18	200.00	0.2 248.9	0.06 S 0.16 W
300.00	0.35	353.25	0.26	300.00	0.4 327.1	0.31 N 0.20 W
400.00	0.46	4.57	0.13	400.00	1.0 348.5	1.02 N 0.21 W
500.00	0.39	49.33	0.33	499.99	1.6 2.9	1.64 N 0.08 E
600.00	1.12	15.61	0.82	599.99	2.9 12.2	2.80 N 0.60 E
700.00	2.63	62.40	2.04	699.93	5.6 31.2	4.80 N 2.90 E
800.00	3.23	46.60	1.00	799.80	10.5 41.8	7.80 N 6.98 E
900.00	3.19	38.83	0.44	899.65	16.1 42.2	11.90 N 10.78 E
1000.00	2.83	99.60	3.06	999.53	20.3 47.6	13.66 N 14.96 E
1100.00	4.58	94.52	1.77	1099.32	25.0 58.8	12.93 N 21.37 E
1200.00	4.81	81.82	1.06	1198.99	32.3 65.9	13.21 N 29.50 E
1300.00	3.11	51.52	2.64	1298.76	39.0 66.6	15.50 N 35.77 E
1400.00	3.11	60.75	0.50	1398.61	44.3 65.3	18.51 N 40.26 E
1481.39	1.85	4.93	3.16	1479.93	47.2 63.7	20.90 N 42.29 E
1500.00	1.86	9.51	0.80	1498.53	47.5 63.1	21.49 N 42.37 E
1600.00	1.23	14.62	0.65	1598.50	49.2 60.6	24.13 N 42.91 E
1672.01	1.46	52.23	1.24	1670.49	50.7 59.9	25.44 N 43.83 E
1767.32	1.33	74.56	0.58	1765.77	52.9 60.0	26.48 N 45.85 E

A Gyrodata Directional Survey

PARALLEL PETROLEUM

Location: PATRIOT #1, EDDY COUNTY, NEW MEXICO

Lease: DUKE FED Well: #2, 4-1/2" DRILLPIPE

Job Number: MD0107G_105

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
1862.63	0.96	72.94	0.38	1861.06	54.8 60.5	27.01 N 47.68 E
1957.94	0.78	64.11	0.24	1956.36	56.2 60.7	27.53 N 49.03 E
2053.25	0.54	72.78	0.27	2051.66	57.3 60.8	27.94 N 50.04 E
2148.56	0.39	90.06	0.22	2146.97	58.0 61.1	28.07 N 50.79 E
2243.87	0.29	100.16	0.12	2242.28	58.5 61.4	28.03 N 51.35 E
2339.18	0.19	148.53	0.23	2337.59	58.7 61.7	27.85 N 51.67 E
2434.49	0.19	161.41	0.05	2432.90	58.7 62.0	27.56 N 51.81 E
2529.80	0.15	159.23	0.05	2528.21	58.6 62.3	27.30 N 51.90 E
2625.11	0.13	172.49	0.04	2623.52	58.6 62.5	27.07 N 51.96 E
2720.42	0.21	78.43	0.26	2718.83	58.7 62.6	27.00 N 52.14 E
2815.73	0.16	65.84	0.06	2814.14	59.0 62.7	27.09 N 52.43 E
2911.04	0.09	9.09	0.14	2909.44	59.2 62.6	27.21 N 52.56 E
3006.35	0.26	339.69	0.20	3004.75	59.3 62.4	27.49 N 52.50 E
3101.66	0.14	337.12	0.13	3100.06	59.3 62.1	27.79 N 52.38 E
3196.97	0.26	93.99	0.36	3195.37	59.5 62.1	27.88 N 52.55 E
3292.28	0.48	99.46	0.24	3290.68	60.0 62.4	27.80 N 53.16 E
3387.59	0.58	119.92	0.22	3385.99	60.6 63.0	27.49 N 53.97 E
3482.90	0.30	155.12	0.40	3481.29	60.8 63.6	27.02 N 54.50 E
3578.21	0.16	197.83	0.22	3576.60	60.7 63.9	26.67 N 54.56 E
3673.52	0.06	74.10	0.20	3671.91	60.7 64.0	26.56 N 54.57 E
3768.83	0.43	56.24	0.39	3767.22	61.1 64.0	26.78 N 54.91 E
3864.14	0.64	44.38	0.24	3862.53	61.9 63.8	27.35 N 55.58 E
3959.45	0.68	47.40	0.06	3957.83	63.0 63.5	28.12 N 56.37 E

A Gyrodata Directional Survey

PARALLEL PETROLEUM

Location: PATRIOT #1, EDDY COUNTY, NEW MEXICO

Lease: DUKE FED Well: #2, 4-1/2" DRILLPIPE

Job Number: MD0107G_105

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
4054.76	0.67	0.57	0.56	4053.14	63.8 62.9	29.06 N 56.79 E
4150.07	0.56	329.56	0.36	4148.44	64.0 62.1	30.01 N 56.56 E
4245.38	0.78	339.03	0.25	4243.74	64.1 61.1	31.01 N 56.10 E
4340.69	0.64	338.13	0.14	4339.05	64.3 60.0	32.11 N 55.67 E
4436.00	0.84	288.90	0.67	4434.35	63.9 59.1	32.83 N 54.81 E
4468.00	0.95	281.24	0.51	4466.35	63.5 58.8	32.96 N 54.33 E

Final Station Closure: Distance: 63.55 ft Az: 58.75 deg.

SLB MWD Survey Survey Report

Report Date: January 26, 2007	Survey / DLS Computation Method: Minimum Curvature / Lubinski
Client: Parallel Petroleum	Vertical Section Azimuth: 270.240°
Field: NM, Eddy County (Parallel Petroleum)	Vertical Section Origin: N 0.000 ft, E 0.000 ft
Structure / Slot: Parallel Pet. Duke 4 Federal #2 / Parallel Pet. Duke 4 Federal #2	TVD Reference Datum: RKB
Well: Duke 4 Federal #2	TVD Reference Elevation: 4368.0 ft relative to
Borehole: Horizontal	Sea Bed / Ground Level Elevation: 4356.000 ft relative to
UWV/API#:	Magnetic Declination: 8.726°
Survey Name / Date: SLB MWD SVY Duke 4 Fed 21 / January 19, 2007	Total Field Strength: 49225.287 nT
Tort / AHD / DDI / ERD ratio: 163.847° / 4250.29 ft / 6.130 / 1.001	Magnetic Dip: 60.520°
Grid Coordinate System: NAD27 New Mexico State Planes, Eastern Zone, US Feet	Declination Date: January 19, 2007
Location Lat/Long: N 32 41 3.610, W 104 47 29.920	Magnetic Declination Model: BGM 2006
Location Grid N/E Y/X: N 612977.092 ftUS, E 358990.663 ftUS	North Reference: Grid North
Grid Convergence Angle: -0.24749649°	Total Corr Mag North -> Grid North: +8.973°
Grid Scale Factor: 0.99993186	Local Coordinates Referenced To: Well Head

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (deg)	DLS (deg/100 ft)	Mag / Grav Tool Face (deg)
Tie-In / Gyro SVY	3768.80	0.43	56.24	3767.19	-54.80	26.78	54.91	61.09	64.00	0.39	54.78M
	3772.00	0.90	54.78	3770.39	-54.83	26.80	54.94	61.13	64.00	14.70	330.57M
	3804.00	0.71	330.57	3802.39	-54.94	27.12	55.05	61.37	63.78	3.40	280.61M
	3835.00	4.95	280.61	3833.35	-53.52	27.53	53.64	60.29	62.83	14.60	274.90M
	3867.00	10.06	274.90	3865.06	-49.38	28.02	49.50	56.88	60.48	16.12	4.99L
	3899.00	14.81	273.28	3896.30	-42.50	28.50	42.62	51.27	56.24	14.88	0.95R
	3931.00	18.70	273.48	3926.94	-33.29	29.04	33.42	44.27	49.01	12.16	2.19L
	3963.00	22.87	273.07	3956.85	-21.96	29.69	22.08	37.00	36.64	13.04	HS
	3994.00	27.33	273.07	3984.92	-8.83	30.39	8.95	31.68	16.42	14.39	19.36L
	4026.00	31.88	270.07	4012.73	6.97	30.79	-6.84	31.54	347.48	14.95	2.47L
	4058.00	35.97	269.77	4039.28	24.82	30.77	-24.70	39.45	321.25	12.79	9.93L
	4090.00	39.07	268.91	4064.66	44.31	30.54	-44.18	53.71	304.65	9.82	12.21R
	4121.00	43.33	270.25	4087.98	64.72	30.40	-64.59	71.39	295.20	14.03	3.41R
	4153.00	47.94	270.62	4110.35	87.59	30.57	-87.46	92.65	289.27	14.43	4.74R
	4185.00	52.54	271.10	4130.81	112.18	30.95	-112.05	116.25	285.44	14.42	16.12L
	4217.00	54.66	270.35	4149.80	137.94	31.27	-137.81	141.31	282.78	6.89	12.24L
	4249.00	57.14	269.71	4167.73	164.43	31.28	-164.30	167.25	280.78	7.92	4.66L
	4280.00	61.57	269.30	4183.53	191.09	31.05	-190.97	193.47	279.23	14.34	3.77L
	4312.00	65.72	269.00	4197.73	219.76	30.62	-219.63	221.75	277.94	13.00	7.05L
	4344.00	68.89	268.58	4210.08	249.27	30.00	-249.14	250.94	276.87	9.98	5.91L
	4376.00	72.39	268.20	4220.69	279.44	29.15	-279.32	280.83	275.96	10.99	11.52L
	4407.00	76.50	267.34	4229.00	309.27	27.98	-309.15	310.41	275.17	13.52	2.35R
	4439.00	79.38	267.46	4235.68	340.52	26.57	-340.41	341.44	274.46	9.01	12.11R
	4471.00	81.27	267.87	4241.06	372.03	25.28	-371.93	372.78	273.89	6.04	8.09L
	4503.00	84.21	267.45	4245.10	403.74	23.98	-403.64	404.35	273.40	9.28	5.28L
	4535.00	88.11	267.09	4247.25	435.62	22.46	-435.53	436.10	272.95	12.24	1.93R
	4566.00	91.38	267.20	4247.38	466.57	20.92	-466.48	466.95	272.57	10.55	43.25L
	4630.00	91.55	267.04	4245.75	530.45	17.70	-530.38	530.68	271.91	0.36	145.89L
	4662.00	91.24	266.83	4244.97	562.39	15.99	-562.33	562.55	271.63	1.17	92.03R
	4757.00	91.17	268.79	4242.97	657.28	12.37	-657.23	657.35	271.08	2.06	118.93R
	4802.00	90.96	269.17	4242.13	702.26	11.56	-702.22	702.31	270.94	0.96	124.47L
	4884.00	90.50	268.50	4241.09	784.23	9.90	-784.19	784.25	270.72	0.99	123.88L
	4979.00	90.03	267.80	4240.65	879.16	6.83	-879.14	879.17	270.45	0.89	31.06R
	5075.00	91.69	268.80	4239.21	975.09	3.98	-975.08	975.09	270.23	2.02	88.55R
	5170.00	91.75	271.23	4236.36	1070.04	4.01	-1070.03	1070.04	270.21	2.56	87.61R
	5213.00	91.82	272.93	4235.02	1112.99	5.57	-1112.98	1112.99	270.29	3.95	99.73R
	5305.00	91.76	273.28	4232.14	1204.83	10.55	-1204.80	1204.85	270.50	0.39	40.23R
	5398.00	92.61	274.00	4228.60	1297.60	16.45	-1297.54	1297.65	270.73	1.20	121.37L
	5490.00	91.75	272.59	4225.10	1389.40	21.73	-1389.32	1389.49	270.90	1.79	112.89L
	5582.00	90.93	270.65	4222.95	1481.34	24.33	-1481.26	1481.46	270.94	2.29	86.82L
	5676.00	90.96	270.11	4221.40	1575.33	24.95	-1575.24	1575.44	270.91	0.58	151.78L
	5771.00	90.14	269.67	4220.49	1670.32	24.77	-1670.23	1670.42	270.85	0.98	87.27L
	5866.00	90.17	269.04	4220.23	1765.31	23.70	-1765.23	1765.39	270.77	0.66	32.82R

5962.00	90.48	269.24	4219.68	1861.29	22.26	-1861.22	1861.35	270.69	0.38	33.39R
6057.00	91.89	270.17	4217.72	1956.26	21.77	-1956.19	1956.31	270.64	1.78	149.86L
6152.00	91.58	269.99	4214.84	2051.22	21.91	-2051.15	2051.26	270.61	0.38	84.61R
6248.00	91.76	271.91	4212.04	2147.17	23.50	-2147.09	2147.22	270.63	2.01	107.76L
6343.00	91.34	270.60	4209.48	2242.12	25.58	-2242.03	2242.17	270.65	1.45	52.21L
6439.00	91.65	270.20	4206.97	2338.08	26.25	-2337.99	2338.14	270.64	0.53	168.11R
6534.00	90.89	270.36	4204.86	2433.06	26.71	-2432.97	2433.11	270.63	0.82	148.48L
6629.00	90.14	269.90	4204.01	2528.05	26.93	-2527.96	2528.11	270.61	0.93	63.43R
6725.00	90.17	269.96	4203.75	2624.05	26.81	-2623.96	2624.10	270.59	0.07	139.40R
6820.00	90.03	270.08	4203.59	2719.05	26.84	-2718.96	2719.09	270.57	0.19	52.21R
6915.00	91.65	272.17	4202.19	2814.02	28.71	-2813.93	2814.07	270.58	2.78	115.47L
7011.00	90.00	268.71	4200.81	2909.99	29.44	-2909.89	2910.04	270.58	3.99	40.59R
7042.00	91.82	270.27	4200.32	2940.98	29.17	-2940.89	2941.03	270.57	7.73	74.35R
7074.00	91.89	270.52	4199.28	2972.97	29.39	-2972.87	2973.01	270.57	0.81	129.82L
7104.00	91.69	270.28	4198.34	3002.95	29.60	-3002.85	3003.00	270.56	1.04	177.36R
7138.00	90.17	270.35	4197.79	3036.95	29.78	-3036.85	3036.99	270.56	4.48	59.80R
7233.00	92.03	273.55	4195.97	3131.87	33.01	-3131.76	3131.93	270.60	3.90	LS
7329.00	90.76	273.55	4193.63	3227.68	38.96	-3227.54	3227.78	270.69	1.32	90.00L
7424.00	90.76	273.01	4192.37	3322.54	44.39	-3322.38	3322.68	270.77	0.57	43.56R
7520.00	91.17	273.40	4190.75	3418.39	49.76	-3418.22	3418.58	270.83	0.59	172.95R
7615.00	89.31	273.63	4190.36	3513.23	55.58	-3513.03	3513.47	270.91	1.97	174.96L
7710.00	88.97	273.60	4191.78	3608.06	61.57	-3607.83	3608.36	270.98	0.36	18.43R
7805.00	89.21	273.68	4193.29	3702.88	67.60	-3702.63	3703.25	271.05	0.27	62.24L
7900.00	89.31	273.49	4194.52	3797.71	73.54	-3797.44	3798.15	271.11	0.23	42.51R
7995.00	89.55	273.71	4195.46	3892.54	79.51	-3892.24	3893.05	271.17	0.34	3.01L
8090.00	89.93	273.69	4195.89	3987.37	85.64	-3987.04	3987.96	271.23	0.40	55.01R
8147.00	90.21	274.09	4195.83	4044.25	89.50	-4043.91	4044.90	271.27	0.86	90.00R
8224.00	90.21	274.10	4195.54	4121.08	95.00	-4120.71	4121.81	271.32	0.01	-

Survey Type: Non-Def Survey

Survey Error Model: SLB ISCWSA version 24 *** 3-D 95.00% Confidence 2.7955 sigma

Surveying Prog:

MD From (ft)	MD To (ft)	EOU Freq	Survey Tool Type	Borehole -> Survey
0.00	12.00	Act-Stns	SLB_CNSG+DPIPE-Depth Only	Pilot Hole -> Duke 4 Fed #2 Gyro 0' to 4468'
12.00	3768.80	Act-Stns	SLB_CNSG+DPIPE	Pilot Hole -> Duke 4 Fed #2 Gyro 0' to 4468'
3768.80	8224.00	Act-Stns	SLB_UNKNOWN (default tool used)	Horizontal -> SLB MWD SVY Duke 4 Fed 21

**Italicized stations are NOT used in position calculations.*