

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Revised August 1, 2011
Submit one copy to appropriate
District Office

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

AS-DRILLED PLAT

¹ API Number 30-015-45396	² Pool Code 97905	³ Pool Name WC G-07 S223021G; Bone Spring
⁴ Property Code 32284	⁵ Property Name JAMES RANCH UNIT DI 1 BS2A-7W	⁶ Well Number 212H
⁷ OGRID No. 373075	⁸ Operator Name XTO PERMIAN OPERATING, LLC.	⁹ Elevation 3,166'

¹⁰ Surface Location

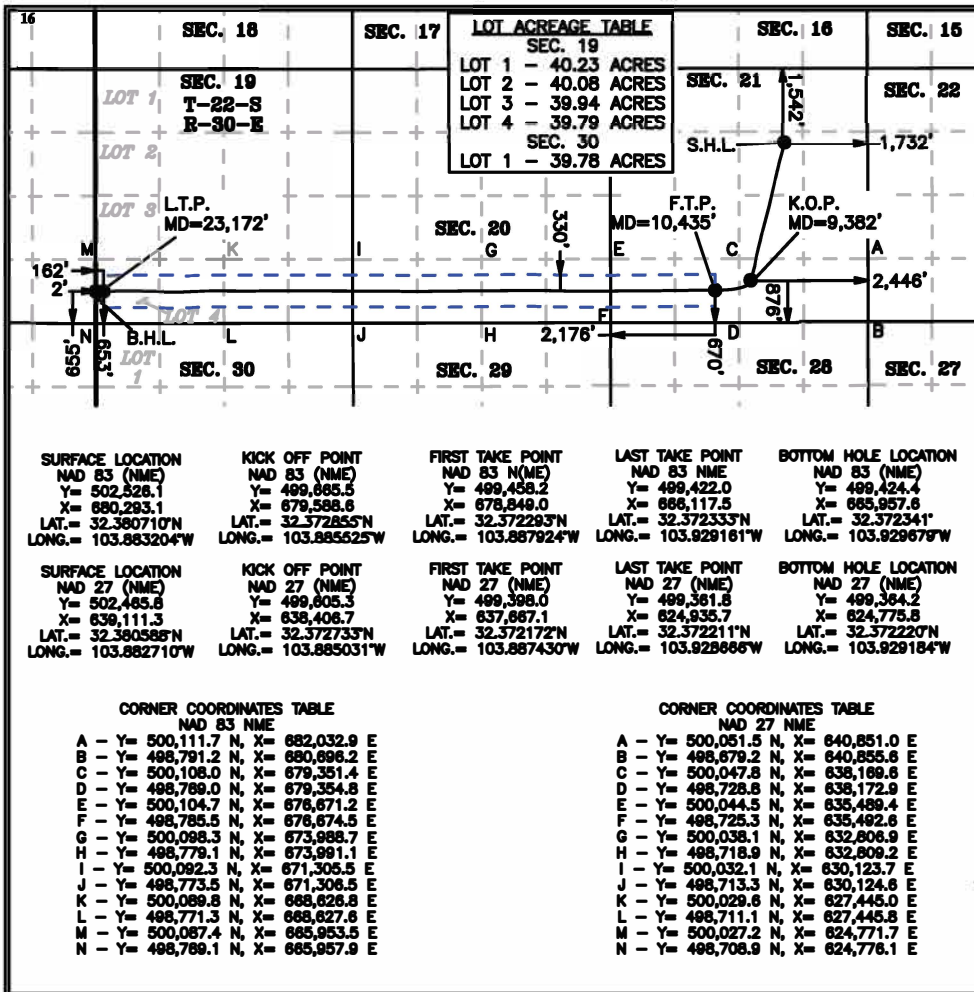
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	21	22 S	30 E		1,542	NORTH	1,732	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	19	22 S	30 E		655	SOUTH	2	WEST	EDDY

¹² Dedicated Acres 400	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.
NOTE: AS-DRILLED BOTTOM HOLE PLOTTED FROM DATA FURNISHED BY XTO ENERGY.



¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: *Tracie J. Cherry* Date: 06/29/20

Tracie J. Cherry, Regulatory Coordinator

Printed Name

tracie_cherry@xtoenergy.com

E-mail Address

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

6-23-2020

Date of Survey

Signature and Seal of
Professional Surveyor:



MARK DILLON HARP 23786
Certificate Number

RR

2017050647

Intent ☐ As Drilled ☐

API #		
Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Is this well the defining well for the Horizontal Spacing Unit? ☐

Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number



Weatherford

Drilling Services
10000 West County Rd. 116
P.O. Box 61028
Midland, TX USA 79711
Tel. (432) 561-8892 Fax (432) 561-8895

XTO Energy
6401 Holliday Hill Road
Midland, TX 79707

Date: September 4, 2019

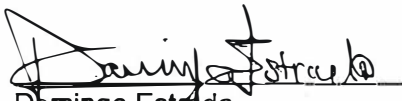
Attention: Manny Garcia

Re: XTO Energy
Well: James Ranch Unit DI 1 BS2A-7W #212H
Eddy County, New Mexico

Enclosed, please find the original survey performed on the referenced well by Precision Energy Services, Inc. (P-5 No. 676004), a Weatherford company. Other information required by your office is as follows:

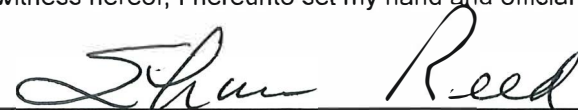
Name & Title Of Surveyor	Well Number	Surveyed Depths	Dates Performed	Type of Survey
Domingo Estrada	212H	155 MD	7/27/2019	Measurement
MWD Ops. Coordinator		23,303 MD	9/3/2019	While Drilling

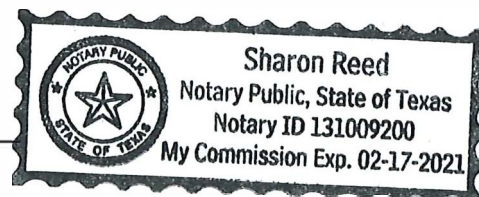
A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.


Domingo Estrada
MWD Ops. Coordinator

On this, the 10th day of September, 2019, before me a notary public, the undersigned officer, personally appeared Domingo Estrada, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness hereof, I hereunto set my hand and official seal.


Notary Public



**5D Survey Report****XTO Energy**

Field Name: *XTO NAD 27 NME*
Site Name: *James Ranch Unit DI 1 #210H_211H_212H_213H*
Well Name: *James Ranch Unit DI 1 BS2A-7W #212H*
File number: *13840321*
Survey: *Definitive survey*

4 September 2019





James Ranch Unit DI 1 BS2A-7W #212H

Field Name: XTO NAD 27 NME	Map Units: US ft		Company Name: XTO Energy	
	Vertical Reference Datum (VRD): Mean Sea Level			
	Projected Coordinate System: NAD27 / New Mexico East			
	Comment:			
Site: James Ranch Unit DI 1 #210H_211H_2 12H_213H	Units: US ft	North Reference: Grid	Convergence Angle: 0.24	
	Position:	Northing: 502465.80 US ft	Latitude: 32° 22' 50.12"	
		Easting: 639082.80 US ft	Longitude: -103° 52' 58.09"	
	Elevation above MSL:3166.00 US ft			
Comment: Eddy Co, NM				
Slot: James Ranch Unit DI 1 BS2A- 7W #212H	Position (Relative to Site Centre)			
	+N/-S: 0.00 US ft	Northing: 502465.80 US ft	Latitude: 32° 22' 50.12"	
	+E/-W: 28.50 US ft	Easting: 639111.30 US ft	Longitude: -103° 52' 57.76"	
	Elevation above MSL: 3166.00 US ft			
Comment:				
Well: James Ranch Unit DI 1 BS2A- 7W #212H	Type:Main well		UWI:	
	File Number: 13840321	Comment: Noram 25		
	Closure Distance:14667.2US ft		Closure Azimuth:257.79°	
	Vertical Section: Position of Origin (Relative to Slot centre)			
		+N/-S: 0.00 US ft	+E/-W: 0.00 US ft	Az: 269.91°
Drill floor: Survey Name: Definitive Survey				
Rig Height (Well TVD Reference): Elevation above MSL: 3191.00US ft Inclination: 0.00° Azimuth: 0.00° 25.00US ft				
Survey Name:Definitive Survey				
Date: 05/Feb/2019		Survey Tool: See Survey Tool Ranges below.	Comment:	Company:
Magnetic Model:				
Model Name: MagVar IFR	Date: 01/Aug/2019	Field Strength: 47908.0nT	Declination: 7.13°	Dip: 60.10°
Tie Point:				
MD: 0.00 US ft	Inclination: 0.00°	Azimuth: 0.00°	TVD: 0.00 US ft	North Offset: 0.00 US ftEast Offset: 0.00 US ft

5D Survey Report

Survey Tool Ranges:			
Name	Start MD(USFt)	End MD(USFt)	Source Survey
MWD + IFR	0.00	331.00	WFT MWD+IFR_1
NO SURV 2d	331.00	420.00	WFT No Surv 2d_1
NO SURV 1d	420.00	680.00	WFT No Surv 1d_2
MWD + IFR	680.00	2175.00	WFT MWD+IFR_2
MWD + IFR	2175.00	3367.00	WFT MWD+IFR_3
MWD + IFR	3367.00	7460.00	WFT MWD+IFR_4
MWD + IFR + MS	7460.00	9522.00	WFT MWD+IFR+MS_5
MWD + IFR + MS	9522.00	10375.00	WFT MWD+IFR+MS_6
MWD + IFR + MS	10375.00	19560.00	WFT MWD+IFR+MS_7
MWD + IFR + MS	19560.00	23332.00	WFT MWD+IFR+MS_8

Casing Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)									
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	TVD (MSL) (US ft)	Northing (US ft)	Easting (US ft)	Name
539.00	0.25	198.14	538.89	0.71	-8.39	-2652.11	502466.51	639102.91	18 5/8 in
3443.00	23.86	193.05	3373.00	-449.15	-115.07	182.00	502016.65	638996.23	13 3/8 in
7533.00	24.14	192.07	7083.51	-2118.69	-524.51	3892.51	500347.11	638586.79	9 5/8 in

Wellpath created using minimum curvature.

Survey Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	Clos.Dist (US ft)	Clos.Az (°)	Comment
0.00	0.00	0.00	0.00	-0.00	0.00	0.00	502465.80	639111.30	0.00	33.66	First WFT SVY
155.00	0.07	354.86	155.00	0.01	0.09	-0.01	502465.89	639111.29	0.09	354.86	
243.00	1.79	272.53	242.99	1.39	0.21	-1.39	502466.01	639109.91	1.40	278.55	
331.00	2.02	276.91	330.94	4.30	0.46	-4.30	502466.26	639107.00	4.32	276.05	
391.00	1.60	284.93	390.91	6.16	0.80	-6.16	502466.60	639105.14	6.21	277.39	
420.00	1.36	271.66	419.90	6.89	0.91	-6.89	502466.71	639104.41	6.95	277.55	18 5/8 in
539.00	0.25	198.14	538.89	8.38	0.71	-8.39	502466.51	639102.91	8.42	274.84	
586.00	0.55	128.67	585.88	8.24	0.47	-8.24	502466.27	639103.06	8.25	273.28	
680.00	0.72	127.55	679.88	7.42	-0.17	-7.42	502465.63	639103.88	7.42	268.69	
774.00	0.56	143.35	773.87	6.68	-0.90	-6.68	502464.90	639104.62	6.74	262.34	
851.00	0.72	133.94	850.87	6.11	-1.54	-6.10	502464.26	639105.20	6.29	255.88	
945.00	0.63	142.05	944.86	5.37	-2.35	-5.36	502463.45	639105.94	5.86	246.31	
1039.00	0.78	142.01	1038.85	4.66	-3.26	-4.65	502462.54	639106.65	5.68	234.93	
1134.00	0.76	147.69	1133.85	3.92	-4.31	-3.92	502461.49	639107.38	5.82	222.27	
1228.00	0.95	145.16	1227.84	3.15	-5.47	-3.14	502460.33	639108.16	6.31	209.82	
1323.00	1.22	148.76	1322.82	2.17	-6.98	-2.16	502458.82	639109.14	7.31	197.20	
1418.00	1.09	141.11	1417.80	1.08	-8.55	-1.07	502457.25	639110.23	8.62	187.14	
1513.00	1.61	166.53	1512.77	0.21	-10.55	-0.19	502455.25	639111.11	10.56	181.05	
1607.00	2.55	178.79	1606.71	-0.14	-13.93	0.16	502451.87	639111.46	13.93	179.34	
1701.00	3.80	185.79	1700.56	0.14	-19.12	-0.11	502446.68	639111.19	19.12	180.33	
1796.00	5.01	190.40	1795.28	1.22	-26.33	-1.18	502439.47	639110.12	26.36	182.56	
1890.00	6.01	192.52	1888.85	3.04	-35.17	-2.99	502430.63	639108.31	35.30	184.85	
1985.00	7.57	195.06	1983.18	5.76	-46.07	-5.69	502419.73	639105.61	46.42	187.04	
2080.00	9.00	195.65	2077.18	9.41	-59.27	-9.32	502406.53	639101.98	60.00	188.94	
2175.00	10.05	195.49	2170.87	13.66	-74.41	-13.54	502391.39	639097.76	75.63	190.31	
2269.00	10.92	195.01	2263.30	18.18	-90.92	-18.03	502374.88	639093.27	92.69	191.22	
2364.00	11.28	197.20	2356.53	23.28	-108.48	-23.11	502357.32	639088.19	110.92	192.03	
2459.00	12.13	199.29	2449.55	29.36	-126.78	-29.16	502339.02	639082.14	130.09	192.95	
2552.00	14.57	199.02	2540.03	36.43	-147.06	-36.20	502318.74	639075.10	151.45	193.83	
2647.00	15.49	194.96	2631.78	43.64	-170.62	-43.37	502295.18	639067.93	176.04	194.26	
2742.00	17.24	194.13	2722.93	50.39	-196.53	-50.08	502269.27	639061.22	202.81	194.30	
2837.00	18.92	193.82	2813.24	57.55	-225.14	-57.20	502240.66	639054.10	232.29	194.25	
2930.00	19.99	195.25	2900.92	65.38	-255.12	-64.98	502210.68	639046.32	263.26	194.29	
3025.00	21.51	196.88	2989.76	74.76	-287.45	-74.31	502178.35	639036.99	296.90	194.49	
3120.00	22.97	193.98	3077.69	84.35	-322.11	-83.84	502143.69	639027.46	332.84	194.59	
3215.00	23.69	195.12	3164.93	93.86	-358.52	-93.30	502107.28	639018.00	370.46	194.59	

5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	Clos.Dist (US ft)	Clos.Az (°)	Comment
3310.00	24.44	193.68	3251.67	103.55	-396.04	-102.93	502069.76	639008.37	409.20	194.57	
3367.00	24.26	192.44	3303.60	108.90	-418.93	-108.24	502046.87	639003.06	432.69	194.49	
3443.00	23.86	193.05	3373.00	115.78	-449.15	-115.07	502016.65	638996.23	463.66	194.37	13 3/8 in
3500.00	23.56	193.52	3425.19	121.08	-471.46	-120.34	501994.34	638990.96	486.58	194.32	
3594.00	23.98	193.72	3511.21	130.06	-508.28	-129.26	501957.52	638982.04	524.46	194.27	
3688.00	23.74	194.40	3597.18	139.35	-545.17	-138.50	501920.63	638972.80	562.48	194.25	
3783.00	25.09	194.32	3683.68	149.15	-583.21	-148.24	501882.59	638963.06	601.75	194.26	
3877.00	25.60	194.88	3768.63	159.36	-622.15	-158.38	501843.65	638952.92	641.99	194.28	
3970.00	25.23	194.65	3852.63	169.59	-660.74	-168.55	501805.06	638942.75	681.90	194.31	
4065.00	25.27	192.93	3938.56	179.31	-700.09	-178.21	501765.71	638933.09	722.42	194.28	
4159.00	24.88	192.88	4023.70	188.27	-738.92	-187.11	501726.88	638924.19	762.24	194.21	
4254.00	25.29	190.89	4109.74	196.62	-778.33	-195.40	501687.47	638915.90	802.48	194.09	
4348.00	25.53	190.19	4194.64	204.06	-817.99	-202.77	501647.81	638908.53	842.74	193.92	
4442.00	25.01	190.83	4279.65	211.44	-857.44	-210.09	501608.36	638901.21	882.80	193.77	
4537.00	24.87	192.35	4365.79	219.54	-896.68	-218.14	501569.12	638893.16	922.83	193.67	
4632.00	25.28	192.76	4451.84	228.36	-935.98	-226.89	501529.82	638884.41	963.08	193.63	
4727.00	25.57	192.34	4537.64	237.28	-975.79	-235.75	501490.01	638875.55	1003.86	193.58	
4821.00	25.50	193.01	4622.46	246.24	-1015.32	-244.64	501450.48	638866.66	1044.38	193.55	
4916.00	25.51	193.09	4708.20	255.54	-1055.17	-253.88	501410.63	638857.42	1085.28	193.53	
5010.00	25.42	192.33	4793.07	264.49	-1094.59	-262.77	501371.21	638848.53	1125.69	193.50	
5104.00	25.48	193.42	4877.94	273.55	-1133.97	-271.77	501331.83	638839.53	1166.08	193.48	
5198.00	25.39	193.60	4962.83	283.05	-1173.23	-281.20	501292.57	638830.10	1206.46	193.48	
5293.00	25.08	193.89	5048.77	292.73	-1212.57	-290.83	501253.23	638820.47	1246.96	193.49	
5388.00	24.54	193.83	5135.00	302.34	-1251.27	-300.37	501214.53	638810.93	1286.82	193.50	
5483.00	24.86	193.34	5221.31	311.72	-1289.86	-309.70	501175.94	638801.60	1326.52	193.50	
5578.00	25.24	193.38	5307.37	321.08	-1328.99	-318.99	501136.81	638792.31	1366.74	193.50	
5673.00	25.89	193.80	5393.07	330.78	-1368.84	-328.63	501096.96	638782.67	1407.73	193.50	
5768.00	26.34	195.55	5478.37	341.44	-1409.29	-339.22	501056.51	638772.08	1449.54	193.53	
5862.00	26.48	194.71	5562.56	352.41	-1449.65	-350.14	501016.15	638761.16	1491.33	193.58	
5957.00	26.52	194.76	5647.58	363.26	-1490.64	-360.92	500975.16	638750.38	1533.71	193.61	
6051.00	26.18	195.97	5731.81	374.37	-1530.87	-371.97	500934.93	638739.33	1575.41	193.66	
6146.00	25.29	195.59	5817.39	385.66	-1570.56	-383.19	500895.24	638728.11	1616.63	193.71	
6240.00	23.87	194.90	5902.87	396.00	-1608.29	-393.48	500857.51	638717.82	1655.72	193.75	
6335.00	23.66	195.75	5989.82	406.18	-1645.21	-403.59	500820.59	638707.71	1693.99	193.78	
6429.00	22.90	195.40	6076.16	416.21	-1680.99	-413.57	500784.81	638697.73	1731.12	193.82	
6523.00	23.00	195.31	6162.72	425.97	-1716.34	-423.28	500749.46	638688.02	1767.76	193.85	
6617.00	24.00	194.85	6248.92	435.78	-1752.53	-433.02	500713.27	638678.28	1805.23	193.88	
6712.00	24.45	194.86	6335.56	445.83	-1790.21	-443.02	500675.59	638668.28	1844.21	193.90	
6806.00	23.46	195.74	6421.46	455.95	-1827.02	-453.08	500638.78	638658.22	1882.36	193.93	
6901.00	23.43	194.48	6508.62	465.86	-1863.51	-462.94	500602.29	638648.36	1920.15	193.95	
6995.00	24.57	193.69	6594.49	475.22	-1900.59	-472.23	500565.21	638639.07	1958.38	193.95	
7090.00	24.75	193.83	6680.83	484.71	-1939.09	-481.66	500526.71	638629.64	1998.02	193.95	
7185.00	24.80	194.15	6767.08	494.39	-1977.72	-491.29	500488.08	638620.01	2037.83	193.95	
7280.00	24.63	193.23	6853.38	503.85	-2016.31	-500.69	500449.49	638610.61	2077.55	193.95	
7375.00	24.70	193.27	6939.71	513.00	-2054.90	-509.77	500410.90	638601.53	2117.19	193.93	
7460.00	24.52	193.30	7016.99	521.19	-2089.35	-517.91	500376.45	638593.39	2152.58	193.92	
7533.00	24.14	192.07	7083.51	527.84	-2118.69	-524.51	500347.11	638586.79	2182.65	193.90	9 5/8 in
7565.00	23.97	191.52	7112.73	530.53	-2131.46	-527.18	500334.34	638584.12	2195.68	193.89	
7629.00	25.30	191.40	7170.91	535.87	-2157.60	-532.48	500308.20	638578.82	2222.34	193.86	
7724.00	24.58	193.97	7257.05	544.71	-2196.68	-541.26	500269.12	638570.04	2262.38	193.84	
7818.00	24.24	195.19	7342.65	554.55	-2234.27	-551.04	500231.53	638560.26	2301.22	193.85	
7913.00	24.60	195.16	7429.15	564.89	-2272.18	-561.32	500193.62	638549.98	2340.48	193.88	
8008.00	24.71	195.64	7515.49	575.47	-2310.38	-571.84	500155.42	638539.46	2380.10	193.90	
8103.00	23.18	194.10	7602.31	585.44	-2347.64	-581.75	500118.16	638529.55	2418.65	193.92	
8197.00	22.07	192.48	7689.07	593.82	-2382.83	-590.08	500082.97	638521.22	2454.80	193.91	
8292.00	23.19	190.77	7776.76	601.23	-2418.63	-597.43	500047.17	638513.87	2491.32	193.87	
8386.00	27.64	189.27	7861.64	608.26	-2458.35	-604.40	500007.45	638506.90	2531.56	193.81	
8480.00	27.82	187.24	7944.85	614.61	-2501.63	-610.68	499964.17	638500.62	2575.09	193.72	
8575.00	23.99	190.51	8030.29	620.99	-2542.63	-617.00	499923.17	638494.30	2616.42	193.64	

5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	Clos.Dist (US ft)	Clos.Az (°)	Comment
8669.00	23.53	192.61	8116.33	628.63	-2579.73	-624.58	499886.07	638486.72	2654.26	193.61	
8763.00	22.97	194.34	8202.69	637.33	-2615.81	-633.22	499849.99	638478.08	2691.36	193.61	
8859.00	21.89	192.58	8291.43	645.92	-2651.43	-641.76	499814.37	638469.54	2727.99	193.61	
8954.00	21.13	192.80	8379.81	653.63	-2685.41	-649.41	499780.39	638461.89	2762.81	193.59	
9048.00	24.34	198.36	8466.51	663.54	-2720.33	-659.27	499745.47	638452.03	2799.07	193.62	
9143.00	25.77	199.58	8552.57	676.69	-2758.37	-672.36	499707.43	638438.94	2839.13	193.70	
9238.00	26.06	197.41	8638.02	689.91	-2797.74	-685.52	499668.06	638425.78	2880.50	193.77	
9333.00	27.46	196.30	8722.84	702.37	-2838.67	-697.91	499627.13	638413.39	2923.21	193.81	
9380.00	28.09	197.16	8764.42	708.71	-2859.65	-704.22	499606.15	638407.08	2945.08	193.83	
9427.00	28.74	202.19	8805.77	716.28	-2880.69	-711.75	499585.11	638399.55	2967.31	193.88	
9474.00	28.81	208.37	8846.97	725.96	-2901.12	-721.40	499564.68	638389.90	2989.47	193.96	
9522.00	28.84	213.93	8889.03	737.95	-2920.90	-733.36	499544.90	638377.94	3011.56	194.09	
9570.00	28.92	222.33	8931.08	752.26	-2939.10	-747.65	499526.70	638363.65	3032.70	194.27	
9618.00	30.76	230.18	8972.73	769.54	-2955.54	-764.90	499510.26	638346.40	3052.92	194.51	
9665.00	34.36	238.11	9012.36	790.07	-2970.26	-785.41	499495.54	638325.89	3072.35	194.81	
9712.00	37.12	244.39	9050.51	814.15	-2983.40	-809.47	499482.40	638301.83	3091.27	195.18	
9759.00	40.22	248.23	9087.21	841.06	-2995.17	-836.36	499470.63	638274.94	3109.75	195.60	
9807.00	44.12	252.72	9122.79	871.45	-3005.88	-866.72	499459.92	638244.58	3128.35	196.08	
9854.00	48.84	253.53	9155.14	904.07	-3015.76	-899.33	499450.04	638211.97	3147.00	196.61	
9902.00	54.71	256.56	9184.84	940.50	-3025.45	-935.75	499440.35	638175.55	3166.86	197.19	
9949.00	60.19	258.95	9210.12	979.22	-3033.82	-974.45	499431.98	638136.85	3186.48	197.81	
9996.00	64.93	261.75	9231.77	1020.33	-3040.79	-1015.56	499425.01	638095.74	3205.90	198.47	
10043.00	69.11	264.39	9250.12	1063.28	-3046.00	-1058.50	499419.80	638052.80	3224.67	199.16	
10091.00	72.44	265.73	9265.92	1108.44	-3049.89	-1103.65	499415.91	638007.65	3243.44	199.89	
10138.00	76.87	265.40	9278.36	1153.62	-3053.40	-1148.83	499412.40	637962.47	3262.37	200.62	
10186.00	81.36	264.79	9287.42	1200.58	-3057.43	-1195.78	499408.37	637915.52	3282.95	201.36	
10233.00	87.55	265.46	9291.96	1247.17	-3061.40	-1242.37	499404.40	637868.93	3303.88	202.09	
10281.00	91.89	266.74	9292.19	1295.05	-3064.67	-1290.24	499401.13	637821.06	3325.19	202.83	
10375.00	90.63	269.78	9290.13	1388.98	-3067.52	-1384.16	499398.28	637727.14	3365.35	204.29	
10439.00	89.93	269.61	9289.81	1452.98	-3067.86	-1448.16	499397.94	637663.14	3392.48	205.27	
10533.00	90.56	269.50	9289.41	1546.97	-3068.59	-1542.16	499397.21	637569.14	3434.31	206.68	
10627.00	90.49	269.69	9288.55	1640.97	-3069.25	-1636.15	499396.55	637475.15	3478.12	208.06	
10721.00	90.56	269.66	9287.69	1734.96	-3069.79	-1730.14	499396.01	637381.16	3523.77	209.41	
10816.00	90.21	269.20	9287.05	1829.96	-3070.73	-1825.14	499395.07	637286.16	3572.19	210.73	
10911.00	90.35	269.47	9286.59	1924.95	-3071.83	-1920.13	499393.97	637191.17	3622.58	212.01	
11005.00	90.63	269.45	9285.78	2018.95	-3072.72	-2014.12	499393.08	637097.18	3674.00	213.24	
11099.00	90.91	269.61	9284.52	2112.93	-3073.49	-2108.11	499392.31	637003.19	3726.99	214.45	
11193.00	90.84	269.50	9283.08	2206.92	-3074.22	-2202.10	499391.58	636909.20	3781.54	215.61	
11288.00	90.98	269.58	9281.57	2301.91	-3074.98	-2297.08	499390.82	636814.22	3838.24	216.76	
11383.00	90.98	269.56	9279.95	2396.89	-3075.70	-2392.06	499390.10	636719.24	3896.39	217.87	
11476.00	90.91	269.43	9278.42	2489.88	-3076.52	-2485.05	499389.28	636626.25	3954.80	218.93	
11570.00	90.98	269.56	9276.87	2583.86	-3077.34	-2579.03	499388.46	636532.27	4015.15	219.97	
11664.00	90.98	269.37	9275.26	2677.85	-3078.22	-2673.01	499387.58	636438.29	4076.82	220.97	
11758.00	90.91	269.34	9273.71	2771.83	-3079.28	-2766.99	499386.52	636344.31	4139.83	221.94	
11852.00	90.98	269.47	9272.16	2865.81	-3080.26	-2860.98	499385.54	636250.32	4203.95	222.89	
11947.00	90.91	269.50	9270.59	2960.80	-3081.11	-2955.96	499384.69	636155.34	4269.77	223.81	
12042.00	90.91	269.48	9269.08	3055.78	-3081.95	-3050.94	499383.85	636060.36	4336.67	224.71	
12136.00	90.98	269.44	9267.53	3149.77	-3082.84	-3144.93	499382.96	635966.37	4403.92	225.57	
12230.00	90.91	269.16	9265.98	3243.75	-3083.99	-3238.91	499381.81	635872.39	4472.30	226.40	
12325.00	90.91	269.27	9264.47	3338.73	-3085.29	-3333.89	499380.51	635777.41	4542.45	227.22	
12419.00	90.91	269.27	9262.98	3432.71	-3086.49	-3427.87	499379.31	635683.43	4612.67	228.00	
12513.00	91.05	269.35	9261.37	3526.69	-3087.62	-3521.85	499378.18	635589.45	4683.67	228.76	
12608.00	90.91	268.90	9259.75	3621.67	-3089.07	-3616.82	499376.73	635494.48	4756.44	229.50	
12702.00	90.84	269.11	9258.31	3715.65	-3090.70	-3710.80	499375.10	635400.50	4829.33	230.21	
12797.00	90.84	269.13	9256.92	3810.63	-3092.16	-3805.77	499373.64	635305.53	4903.61	230.91	
12891.00	91.05	269.65	9255.37	3904.61	-3093.16	-3899.76	499372.64	635211.54	4977.52	231.58	
12986.00	90.98	271.05	9253.69	3999.59	-3092.58	-3994.74	499373.22	635116.56	5051.93	232.25	
13080.00	90.91	270.75	9252.14	4093.56	-3091.11	-4088.71	499374.69	635022.59	5125.67	232.91	
13175.00	91.12	270.95	9250.45	4188.54	-3089.70	-4183.69	499376.10	634927.61	5200.91	233.55	

5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	Clos.Dist (US ft)	Clos.Az (°)	Comment
13270.00	90.91	269.77	9248.77	4283.52	-3089.10	-4278.67	499376.70	634832.63	5277.27	234.17	
13365.00	90.98	271.05	9247.20	4378.50	-3088.42	-4373.65	499377.38	634737.65	5354.17	234.77	
13460.00	90.98	271.05	9245.58	4473.46	-3086.68	-4468.62	499379.12	634642.68	5431.04	235.37	
13555.00	90.98	271.23	9243.95	4568.43	-3084.79	-4563.59	499381.01	634547.71	5508.38	235.94	
13650.00	90.77	271.03	9242.50	4663.40	-3082.92	-4658.56	499382.88	634452.74	5586.28	236.50	
13745.00	90.77	271.03	9241.23	4758.37	-3081.21	-4753.54	499384.59	634357.76	5664.80	237.05	
13839.00	90.84	271.15	9239.91	4852.34	-3079.42	-4847.51	499386.38	634263.79	5742.92	237.57	
13934.00	90.98	271.05	9238.40	4947.31	-3077.60	-4942.48	499388.20	634168.82	5822.35	238.09	
14028.00	90.91	271.10	9236.85	5041.28	-3075.83	-5036.45	499389.97	634074.85	5901.41	238.59	
14123.00	90.98	271.06	9235.28	5136.24	-3074.04	-5131.42	499391.76	633979.88	5981.74	239.08	
14218.00	90.84	271.15	9233.77	5231.21	-3072.21	-5226.39	499393.59	633884.91	6062.48	239.55	
14313.00	90.91	271.09	9232.32	5326.18	-3070.35	-5321.36	499395.45	633789.94	6143.61	240.02	
14407.00	91.05	270.66	9230.71	5420.15	-3068.92	-5415.34	499396.88	633695.96	6224.48	240.46	
14502.00	90.84	268.95	9229.15	5515.13	-3069.24	-5510.32	499396.56	633600.98	6307.45	240.88	
14597.00	91.40	269.11	9227.29	5610.10	-3070.85	-5605.29	499394.95	633506.01	6391.35	241.28	
14691.00	92.10	269.31	9224.42	5704.05	-3072.15	-5699.23	499393.65	633412.07	6474.52	241.67	
14786.00	92.59	269.51	9220.53	5798.97	-3073.12	-5794.15	499392.68	633317.15	6558.68	242.06	
14881.00	93.01	269.24	9215.89	5893.85	-3074.16	-5889.03	499391.64	633222.27	6643.13	242.43	
14975.00	92.45	269.43	9211.41	5987.74	-3075.25	-5982.92	499390.55	633128.38	6726.99	242.80	
15069.00	92.38	269.32	9207.45	6081.65	-3076.27	-6076.83	499389.53	633034.47	6811.11	243.15	
15164.00	92.45	269.11	9203.45	6176.56	-3077.57	-6171.73	499388.23	632939.57	6896.50	243.50	
15259.00	92.45	269.27	9199.39	6271.47	-3078.91	-6266.64	499386.89	632844.66	6982.15	243.83	
15354.00	92.31	269.35	9195.44	6366.38	-3080.06	-6361.55	499385.74	632749.75	7067.96	244.17	
15448.00	92.52	269.20	9191.48	6460.29	-3081.25	-6455.46	499384.55	632655.84	7153.11	244.48	
15542.00	92.59	269.33	9187.29	6554.19	-3082.45	-6549.36	499383.35	632561.94	7238.48	244.80	
15636.00	92.59	269.51	9183.04	6648.09	-3083.40	-6643.26	499382.40	632468.04	7323.95	245.10	
15730.00	92.45	269.09	9178.91	6741.99	-3084.55	-6737.16	499381.25	632374.14	7409.70	245.40	
15825.00	92.94	269.43	9174.44	6836.88	-3085.77	-6832.04	499380.03	632279.26	7496.59	245.69	
15920.00	92.66	269.78	9169.80	6931.77	-3086.43	-6926.93	499379.37	632184.37	7583.43	245.98	
16014.00	92.52	269.36	9165.56	7025.67	-3087.13	-7020.83	499378.67	632090.47	7669.58	246.26	
16109.00	92.17	269.29	9161.67	7120.58	-3088.25	-7115.74	499377.55	631995.56	7757.00	246.54	
16204.00	91.26	269.36	9158.83	7215.54	-3089.37	-7210.69	499376.43	631900.61	7844.63	246.81	
16298.00	92.38	269.47	9155.84	7309.48	-3090.33	-7304.64	499375.47	631806.66	7931.45	247.07	
16393.00	91.19	269.09	9152.88	7404.43	-3091.52	-7399.58	499374.28	631711.72	8019.44	247.32	
16489.00	92.38	269.12	9149.89	7500.37	-3093.02	-7495.52	499372.78	631615.78	8108.62	247.58	
16583.00	92.03	269.02	9146.27	7594.29	-3094.55	-7589.44	499371.25	631521.86	8196.09	247.82	
16678.00	91.61	270.66	9143.26	7689.24	-3094.81	-7684.39	499370.99	631426.91	8284.18	248.06	
16773.00	92.03	270.89	9140.24	7784.18	-3093.53	-7779.33	499372.27	631331.97	8371.85	248.31	
16867.00	91.89	270.80	9137.02	7878.11	-3092.14	-7873.27	499373.66	631238.03	8458.70	248.56	
16960.00	91.83	271.06	9134.01	7971.05	-3090.63	-7966.21	499375.17	631145.09	8544.73	248.80	
17055.00	92.66	271.15	9130.28	8065.96	-3088.80	-8061.11	499377.00	631050.19	8632.63	249.03	
17149.00	91.47	270.24	9126.90	8159.88	-3087.66	-8155.04	499378.14	630956.26	8720.00	249.26	
17243.00	92.45	270.27	9123.68	8253.83	-3087.24	-8248.99	499378.56	630862.31	8807.77	249.48	
17333.00	91.47	270.23	9120.60	8343.77	-3086.85	-8338.93	499378.95	630772.37	8891.93	249.69	
17423.00	91.12	270.30	9118.57	8433.75	-3086.44	-8428.91	499379.36	630682.39	8976.22	249.89	
17514.00	90.77	270.35	9117.07	8524.73	-3085.92	-8519.89	499379.88	630591.41	9061.54	250.09	
17606.00	90.63	270.45	9115.95	8616.72	-3085.28	-8611.88	499380.52	630499.42	9147.87	250.29	
17697.00	90.91	270.27	9114.72	8707.71	-3084.71	-8702.87	499381.09	630408.43	9233.39	250.48	
17790.00	90.91	270.10	9113.25	8800.70	-3084.41	-8795.86	499381.39	630315.44	9320.98	250.68	
17881.00	91.40	270.28	9111.41	8891.68	-3084.10	-8886.84	499381.70	630224.46	9406.79	250.86	
17972.00	91.12	270.28	9109.41	8982.65	-3083.66	-8977.82	499382.14	630133.48	9492.64	251.04	
18064.00	90.35	269.96	9108.23	9074.64	-3083.47	-9069.81	499382.33	630041.49	9579.63	251.22	
18155.00	90.70	270.22	9107.40	9165.64	-3083.32	-9160.81	499382.48	629950.49	9665.78	251.40	
18247.00	90.42	270.07	9106.50	9257.63	-3083.09	-9252.80	499382.71	629858.50	9752.94	251.57	
18339.00	90.49	269.85	9105.77	9349.63	-3083.16	-9344.80	499382.64	629766.50	9840.28	251.74	
18432.00	91.05	269.99	9104.52	9442.62	-3083.29	-9437.79	499382.51	629673.51	9928.67	251.91	
18524.00	90.28	270.01	9103.45	9534.62	-3083.29	-9529.78	499382.51	629581.52	10016.16	252.07	
18616.00	90.56	270.15	9102.77	9626.61	-3083.16	-9621.78	499382.64	629489.52	10103.69	252.23	
18710.00	90.42	269.93	9101.97	9720.61	-3083.09	-9715.78	499382.71	629395.52	10193.22	252.39	

5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)											
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	Clos.Dist (US ft)	Clos.Az (°)	Comment
18805.00	90.28	270.00	9101.39	9815.61	-3083.15	-9810.78	499382.65	629300.52	10283.83	252.55	
18899.00	90.63	270.10	9100.64	9909.60	-3083.07	-9904.77	499382.73	629206.53	10373.52	252.71	
18993.00	90.91	270.09	9099.38	10003.59	-3082.91	-9998.76	499382.89	629112.54	10463.25	252.86	
19087.00	90.91	269.91	9097.89	10097.58	-3082.91	-10092.75	499382.89	629018.55	10553.10	253.01	
19182.00	91.19	270.25	9096.15	10192.57	-3082.78	-10187.74	499383.02	628923.56	10643.94	253.16	
19277.00	91.75	270.72	9093.71	10287.53	-3081.97	-10282.70	499383.83	628828.60	10734.64	253.32	
19370.00	91.75	270.55	9090.87	10380.48	-3080.94	-10375.65	499384.86	628735.65	10823.42	253.46	
19465.00	91.05	269.84	9088.55	10475.45	-3080.62	-10470.62	499385.18	628640.68	10914.40	253.61	
19560.00	90.98	270.08	9086.87	10570.43	-3080.69	-10565.61	499385.11	628545.69	11005.57	253.74	
19682.00	92.47	269.27	9083.19	10692.37	-3081.38	-10687.54	499384.42	628423.76	11122.88	253.92	
19782.00	90.37	268.81	9080.72	10792.32	-3083.05	-10787.49	499382.75	628323.81	11219.41	254.05	
19877.00	91.42	268.72	9079.23	10887.29	-3085.10	-10882.46	499380.70	628228.84	11311.31	254.17	
19970.00	91.17	268.26	9077.13	10980.24	-3087.55	-10975.40	499378.25	628135.90	11401.42	254.29	
20065.00	91.30	269.42	9075.08	11075.20	-3089.47	-11070.36	499376.33	628040.94	11493.38	254.41	
20160.00	91.67	270.12	9072.62	11170.17	-3089.86	-11165.33	499375.94	627945.97	11584.98	254.53	
20254.00	91.79	270.32	9069.78	11264.12	-3089.49	-11259.28	499376.31	627852.02	11675.46	254.66	
20348.00	91.79	270.87	9066.85	11358.07	-3088.52	-11353.23	499377.28	627758.07	11765.83	254.78	
20442.00	91.73	271.34	9063.96	11452.00	-3086.71	-11447.17	499379.09	627664.13	11856.03	254.91	
20536.00	91.79	271.25	9061.07	11545.93	-3084.58	-11541.10	499381.22	627570.20	11946.20	255.04	
20631.00	91.85	271.02	9058.05	11640.86	-3082.70	-11636.03	499383.10	627475.27	12037.46	255.16	
20725.00	91.60	270.01	9055.22	11734.81	-3081.86	-11729.99	499383.94	627381.31	12128.08	255.28	
20819.00	91.79	269.78	9052.44	11828.77	-3082.03	-11823.94	499383.77	627287.36	12219.03	255.39	
20915.00	91.85	269.31	9049.40	11924.72	-3082.79	-11919.89	499383.01	627191.41	12312.09	255.50	
21009.00	91.73	268.90	9046.46	12018.67	-3084.26	-12013.84	499381.54	627097.46	12403.42	255.60	
21103.00	91.67	268.23	9043.67	12112.60	-3086.61	-12107.76	499379.19	627003.54	12495.00	255.70	
21197.00	91.91	267.00	9040.73	12206.47	-3090.52	-12201.63	499375.28	626909.67	12586.95	255.79	
21292.00	91.11	266.72	9038.23	12301.31	-3095.72	-12296.46	499370.08	626814.84	12680.16	255.87	
21385.00	91.17	267.17	9036.38	12394.16	-3100.68	-12389.31	499365.12	626721.99	12771.42	255.95	
21480.00	91.17	268.11	9034.44	12489.07	-3104.59	-12484.21	499361.21	626627.09	12864.44	256.03	
21574.00	91.23	269.03	9032.47	12583.02	-3106.94	-12578.16	499358.86	626533.14	12956.20	256.13	
21669.00	90.49	269.44	9031.05	12678.00	-3108.20	-12673.14	499357.60	626438.16	13048.73	256.22	
21762.00	90.74	270.02	9030.05	12771.00	-3108.64	-12766.13	499357.16	626345.17	13139.17	256.31	
21856.00	90.80	270.88	9028.78	12864.98	-3107.90	-12860.12	499357.90	626251.18	13230.33	256.41	
21951.00	90.86	270.96	9027.41	12959.96	-3106.38	-12955.09	499359.42	626156.21	13322.31	256.52	
22046.00	90.37	271.64	9026.39	13054.92	-3104.22	-13050.06	499361.58	626061.24	13414.19	256.62	
22141.00	90.18	271.50	9025.93	13149.88	-3101.62	-13145.03	499364.18	625966.27	13505.99	256.72	
22236.00	90.62	271.16	9025.27	13244.85	-3099.42	-13240.00	499366.38	625871.30	13597.94	256.82	
22331.00	90.68	271.44	9024.19	13339.82	-3097.26	-13334.97	499368.54	625776.33	13689.94	256.92	
22425.00	90.25	270.87	9023.43	13433.79	-3095.37	-13428.94	499370.43	625682.36	13781.07	257.02	
22519.00	91.48	270.75	9022.01	13527.77	-3094.04	-13522.92	499371.76	625588.38	13872.37	257.11	
22613.00	90.93	269.73	9020.03	13621.74	-3093.64	-13616.90	499372.16	625494.40	13963.90	257.20	
22707.00	90.80	269.15	9018.61	13715.73	-3094.56	-13710.88	499371.24	625400.42	14055.77	257.28	
22802.00	91.23	268.73	9016.93	13810.70	-3096.32	-13805.85	499369.48	625305.45	14148.81	257.36	
22896.00	92.12	268.75	9014.18	13904.64	-3098.39	-13899.79	499367.41	625211.51	14240.93	257.43	
22990.00	90.49	267.86	9012.04	13998.57	-3101.17	-13993.72	499364.63	625117.58	14333.23	257.50	
23085.00	91.67	268.95	9010.25	14093.52	-3103.81	-14088.66	499361.99	625022.64	14426.50	257.58	
23179.00	92.28	270.79	9007.01	14187.46	-3104.02	-14182.60	499361.78	624928.70	14518.30	257.65	
23273.00	90.80	270.69	9004.49	14281.41	-3102.81	-14276.56	499362.99	624834.74	14609.84	257.74	
23303.00	91.91	271.31	9003.78	14311.40	-3102.29	-14306.54	499363.51	624804.76	14639.04	257.77	Last WFT SVY
23332.00	91.91	271.31	9002.81	14340.37	-3101.62	-14335.52	499364.18	624775.78	14667.22	257.79	PTB

Formation Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	TVD (MSL) (US ft)	Northing (US ft)	Easting (US ft)	Name	Comment
151.00	0.07	354.86	151.00	0.09	-0.01	-3040.00	502465.89	639111.29	Rustler	
482.11	0.70	261.43	482.00	0.88	-8.00	-2709.00	502466.68	639103.30	Salado	
675.12	0.71	127.59	675.00	-0.13	-7.47	-2516.00	502465.67	639103.83	Top of Salt	
3333.42	24.36	193.17	3273.00	-405.45	-105.17	82.00	502060.35	639006.13	Base Salt	

5D Survey Report

Formation Points: (Relative to Slot centre)(TVD relative to Well TVD Reference)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	TVD (MSL) (US ft)	Northing (US ft)	Easting (US ft)	Name	Comment
3611.28	23.94	193.84	3527.00	-515.10	-130.93	336.00	501950.70	638980.37	Delaware/La mar	
3659.39	23.81	194.19	3571.00	-533.99	-135.65	380.00	501931.81	638975.65	Bell Canyon	
4635.50	25.29	192.74	4455.00	-937.43	-227.22	1264.00	501528.37	638884.08	Cherry Canyon	
4863.71	25.50	193.05	4661.00	-1033.23	-248.79	1470.00	501432.57	638862.51	Manzanita Marker	
6103.47	25.69	195.76	5779.00	-1552.94	-378.24	2588.00	500912.86	638733.06	Brushy Canyon Ss.	
7548.87	24.05	191.80	7098.00	-2125.03	-525.85	3907.00	500340.77	638585.45	Basal Brushy Canyon Ss.	
7851.30	24.37	195.18	7373.00	-2247.50	-554.63	4182.00	500218.30	638556.67	Bone Spring Lm.	
7909.54	24.59	195.16	7426.00	-2270.78	-560.94	4235.00	500195.02	638550.36	Avalon Ss.	
8142.84	22.71	193.43	7639.00	-2362.72	-585.45	4448.00	500103.08	638525.85	Upper Avalon Carb.	
8231.50	22.47	191.84	7721.00	-2395.61	-592.83	4530.00	500070.19	638518.47	Upper Avalon Sh.	
8318.50	24.44	190.30	7801.00	-2429.15	-599.38	4610.00	500036.65	638511.92	Lw. Avalon Carb.	
8497.08	27.13	187.76	7960.00	-2509.44	-611.71	4769.00	499956.36	638499.59	Lw. Avalon Sh.	
8706.79	23.30	193.30	8151.00	-2594.36	-627.95	4960.00	499871.44	638483.35	Bone Spring Carb.	
8958.49	21.28	193.10	8384.00	-2686.99	-649.77	5193.00	499778.81	638461.53	First Bone Spring Ss.	
9387.46	28.18	197.97	8771.00	-2863.00	-705.28	5580.00	499602.80	638406.02	Second Bone Spring Carb.	
10150.15	78.01	265.24	9281.00	-3054.37	-1160.64	6090.00	499411.43	637950.66	Second Bone Spring A Ss.	