

XTO James Ranch Unit DI 2 #192H MWD Off to 26130ft MD Survey Geodetic



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DISTRICT II-ARTESIA O.C.D.

Report
(Def Survey)

Report Date: October 11, 2018 - 11:19 AM
 Client: XTO
 Field: NM Eddy County (NAD 27)
 Structure / Slot: XTO James Ranch Unit DI 2 #192H / XTO James Ranch Unit DI 2 #192H
 Well: XTO James Ranch Unit DI 2 #192H
 Borehole: Original Borehole
 UWM / API#: Unknown / Unknown
 Survey Name: XTO James Ranch Unit DI 2 #192H MWD Off to 26130ft MD
 Survey Date: August 28, 2018
 Tort / AHD / DDI / ERD Ratio: 346.570' / 15865.262 ft / 7.119' / 1.452
 Coordinate Reference System: NAD27 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 21' 45.82440", W 103° 50' 10.55737"
 Location Grid N/E Y/X: N 496032.500 RUS, E 653479.400 RUS
 CRS Grid Convergence Angle: 0.2661°
 Grid Scale Factor: 0.99993607
 Version / Patch: 2.10.740.0

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 273.976° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: RKB
 TVD Reference Elevation: 3369.000 ft above MSL
 Seabed / Ground Elevation: 3344.000 ft above MSL
 Magnetic Declination: 7.033°
 Total Gravity Field Strength: 988.4607 mgn (9.80665 Based)
 Gravity Model: GARM
 Total Magnetic Field Strength: 48074.396 nT
 Magnetic Dip Angle: 60.136°
 Declination Date: August 28, 2018
 Magnetic Declination Model: HDGM 2018
 North Reference: Grid North
 Grid Convergence Used: 0.2661°
 Total Corr Mag North->Grid North: 6.7669°
 Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100m)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
SHL	0.00	0.00	0.00	0.00	-3369.00	0.00	0.00	0.00	N/A	496032.50	653479.40	N 32° 21' 45.82	W 103° 50' 10.56
	106.00	0.70	293.00	106.00	-3263.00	0.61	0.25	-0.60	0.66	496032.75	653478.80	N 32° 21' 45.83	W 103° 50' 10.56
	202.00	0.40	324.00	201.99	-3167.01	1.38	0.75	-1.33	0.43	496033.25	653478.07	N 32° 21' 45.83	W 103° 50' 10.57
	303.00	0.60	6.00	302.99	-3066.01	1.59	1.56	-1.48	0.40	496034.06	653477.92	N 32° 21' 45.84	W 103° 50' 10.57
	402.00	0.70	338.00	401.98	-2967.02	1.84	2.64	-1.66	0.33	496035.14	653477.74	N 32° 21' 45.85	W 103° 50' 10.58
	500.00	0.60	60.00	499.98	-2869.02	1.67	3.45	-1.44	0.87	496035.95	653477.96	N 32° 21' 45.86	W 103° 50' 10.57
	522.00	0.50	12.00	521.98	-2847.02	1.56	3.60	-1.32	2.08	496036.10	653478.08	N 32° 21' 45.86	W 103° 50' 10.57
	635.00	1.00	6.00	634.97	-2734.03	1.46	5.07	-1.11	0.45	496037.57	653478.29	N 32° 21' 45.87	W 103° 50' 10.57
	834.00	0.56	2.96	833.95	-2535.05	1.42	7.76	-0.88	0.22	496040.26	653478.52	N 32° 21' 45.90	W 103° 50' 10.57
	928.00	0.72	348.02	927.94	-2441.06	1.59	8.80	-0.98	0.24	496041.30	653478.42	N 32° 21' 45.91	W 103° 50' 10.57
	1022.00	0.64	355.44	1021.94	-2347.06	1.83	9.90	-1.14	0.13	496042.40	653478.26	N 32° 21' 45.92	W 103° 50' 10.57
	1116.00	0.73	333.72	1115.93	-2253.07	2.21	10.96	-1.45	0.29	496043.46	653477.95	N 32° 21' 45.93	W 103° 50' 10.57
	1210.00	0.34	352.75	1209.93	-2159.07	2.56	11.78	-1.75	0.45	496044.28	653477.65	N 32° 21' 45.94	W 103° 50' 10.58
	1305.00	0.68	335.92	1304.92	-2064.08	2.88	12.57	-2.02	0.39	496045.07	653477.38	N 32° 21' 45.95	W 103° 50' 10.58
	1399.00	0.60	344.02	1398.92	-1970.08	3.31	13.55	-2.38	0.13	496046.05	653477.02	N 32° 21' 45.96	W 103° 50' 10.58
	1493.00	0.44	317.46	1492.91	-1876.09	3.74	14.29	-2.76	0.30	496046.79	653476.64	N 32° 21' 45.97	W 103° 50' 10.59
	1587.00	0.36	6.77	1586.91	-1782.09	3.99	14.85	-2.97	0.36	496047.35	653476.43	N 32° 21' 45.97	W 103° 50' 10.59
	1681.00	0.53	350.94	1680.91	-1688.09	4.07	15.57	-3.00	0.22	496048.07	653476.40	N 32° 21' 45.98	W 103° 50' 10.59
	1776.00	0.52	329.47	1775.90	-1593.10	4.42	16.38	-3.29	0.21	496048.88	653476.11	N 32° 21' 45.99	W 103° 50' 10.59
	1870.00	0.32	25.43	1869.90	-1499.10	4.56	16.98	-3.39	0.46	496049.48	653476.01	N 32° 21' 45.99	W 103° 50' 10.60
	1964.00	0.52	357.73	1963.90	-1405.10	4.51	17.65	-3.30	0.30	496050.15	653476.10	N 32° 21' 46.00	W 103° 50' 10.59
	2059.00	0.40	42.26	2058.90	-1310.10	4.35	18.32	-3.09	0.39	496050.82	653476.31	N 32° 21' 46.01	W 103° 50' 10.59
	2153.00	0.52	45.47	2152.89	-1216.11	3.87	18.86	-2.57	0.13	496051.36	653476.83	N 32° 21' 46.01	W 103° 50' 10.59
	2248.00	0.60	33.72	2247.89	-1121.11	3.34	19.58	-1.98	0.15	496052.08	653477.42	N 32° 21' 46.02	W 103° 50' 10.58
	2342.00	0.52	7.60	2341.88	-1027.12	3.07	20.41	-1.65	0.28	496052.91	653477.75	N 32° 21' 46.03	W 103° 50' 10.58
	2437.00	0.66	34.31	2436.88	-932.12	2.76	21.29	-1.29	0.32	496053.79	653478.11	N 32° 21' 46.04	W 103° 50' 10.57
	2532.00	0.48	351.63	2531.87	-837.13	2.57	22.14	-1.04	0.47	496054.84	653478.36	N 32° 21' 46.04	W 103° 50' 10.57
	2627.00	1.01	17.76	2626.87	-742.13	2.46	23.33	-0.84	0.65	496055.83	653478.56	N 32° 21' 46.06	W 103° 50' 10.57
	2721.00	0.68	12.29	2720.86	-648.14	2.18	24.66	-0.47	0.36	496057.16	653478.93	N 32° 21' 46.07	W 103° 50' 10.56
	2815.00	1.08	18.45	2814.85	-554.15	1.88	26.05	-0.07	0.44	496058.55	653479.33	N 32° 21' 46.08	W 103° 50' 10.56
	2910.00	0.35	91.77	2909.84	-459.16	1.36	26.89	0.50	1.09	496059.98	653479.90	N 32° 21' 46.09	W 103° 50' 10.55
	3005.00	0.98	102.74	3004.83	-364.17	0.27	26.70	1.59	0.67	496059.20	653480.99	N 32° 21' 46.09	W 103° 50' 10.54
	3098.00	1.32	112.32	3097.81	-271.19	-1.53	26.12	3.35	0.42	496058.62	653482.75	N 32° 21' 46.08	W 103° 50' 10.52
	3193.00	1.69	128.18	3192.78	-176.22	-3.73	24.84	5.47	0.58	496057.34	653484.87	N 32° 21' 46.07	W 103° 50' 10.49
	3288.00	2.17	124.11	3287.73	-81.27	-6.44	22.96	8.06	0.53	496055.46	653487.46	N 32° 21' 46.05	W 103° 50' 10.46
	3382.00	2.25	131.43	3381.66	12.66	-9.45	20.74	10.91	0.31	496053.24	653490.31	N 32° 21' 46.03	W 103° 50' 10.43
	3477.00	2.74	131.17	3476.57	107.57	-12.74	18.01	14.02	0.52	496050.51	653493.42	N 32° 21' 46.00	W 103° 50' 10.39
	3572.00	3.04	130.26	3571.45	202.45	-16.58	14.89	17.65	0.32	496047.39	653497.05	N 32° 21' 45.97	W 103° 50' 10.35
	3666.00	2.11	129.40	3665.35	296.35	-20.00	12.18	20.89	0.99	496044.68	653500.29	N 32° 21' 45.94	W 103° 50' 10.31
	3760.00	2.19	127.02	3759.28	390.28	-22.91	10.00	23.66	0.13	496042.50	653503.06	N 32° 21' 45.92	W 103° 50' 10.28
	3855.00	1.62	138.75	3854.23	485.23	-25.39	7.90	26.00	0.72	496040.40	653505.40	N 32° 21' 45.90	W 103° 50' 10.25
	3951.00	1.32	146.70	3950.20	581.20	-27.02	5.96	27.50	0.38	496038.46	653506.90	N 32° 21' 45.88	W 103° 50' 10.24
	4046.00	0.79	208.47	4045.19	676.19	-27.41	4.47	27.79	1.24	496036.97	653507.19	N 32° 21' 45.87	W 103° 50' 10.23
	4140.00	1.35	232.48	4139.17	770.17	-26.31	3.22	26.60	0.75	496035.72	653506.00	N 32° 21' 45.86	W 103° 50' 10.25
	4234.00	1.30	221.75	4233.14	864.14	-24.83	1.75	25.01	0.27	496034.25	653504.41	N 32° 21' 45.84	W 103° 50' 10.27
	4329.00	1.03	232.44	4328.12	959.12	-23.53	0.43	23.62	0.36	496032.93	653503.02	N 32° 21' 45.83	W 103° 50' 10.28
	4425.00	1.40	234.33	4424.10	1055.10	-21.98	-0.78	21.98	0.39	496031.72	653501.38	N 32° 21' 45.82	W 103° 50' 10.30
	4519.00	1.05	235.96	4518.08	1149.08	-20.42	-1.93	20.33	0.37	496030.57	653499.73	N 32° 21' 45.80	W 103° 50' 10.32
	4614.00	1.21	223.63	4613.08	1244.06	-19.09	-3.15	18.92	0.31	496029.35	653498.32	N 32° 21' 45.79	W 103° 50' 10.34
	4708.00	1.11	237.84	4707.04	1338.04	-17.73	-4.35	17.47	0.32	496028.15	653496.86	N 32° 21' 45.78	W 103° 50' 10.35
	4803.00	1.01	229.87	4802.03	1433.03	-16.38	-5.38	16.05	0.19	496027.12	653495.45	N 32° 21' 45.77	W 103° 50' 10.37
	4897.00	1.00	228.23	4896.01	1527.01	-15.21	-6.46	14.80	0.03	496026.04	653494.20	N 32° 21' 45.76	W 103° 50' 10.39
	4992.00	1.15	223.12	4991.00	1622.00	-14.03	-7.71	13.53	0.19	496024.79	653492.93	N 32° 21' 45.75	W 103° 50' 10.40
	5087.00	1.32	230.46	5085.97	1716.97	-12.64	-9.10	12.04	0.24	496023.40	653491.44	N 32° 21' 45.73	W 103° 50' 10.42
	5182.00	1.09	236.75	5180.95	1811.95	-11.13	-10.29	10.44	0.28	496022.21	653489.84	N 32° 21' 45.72	W 103° 50' 10.44
	5276.00	1.37	222.62	5274.93	1906.93	-9.71	-11.61	8.93	0.44	496020.89	653488.33	N 32° 21' 45.71	W 103° 50' 10.45
	5371.00	1.12	225.51	5369.91	2000.91	-8.39	-13.10	7.50	0.27	496019.40	653486.90	N 32° 21' 45.69	W 103° 50' 10.47
	5466.00	1.06	236.46	5464.89	2095.89	-7.07	-14.23	6.10	0.23	496018.27	653485.50	N 32° 21' 45.68	W 103° 50' 10.49
	5561.00	1.38	233.02	5559.87	2190.87	-5.51	-15.41	4.46	0.35	496017.09	653484.86	N 32° 21' 45.67	W 103° 50' 10.51
	5655.00	1.29	247.96	5653.84	2284.84	-3.71	-16.48	2.57	0.38	496016.02	653481.97	N 32° 21' 45.66	W 103° 50' 10.53
	5750.00	1.36	241.97	5748.82	2379.82	-1.79	-17.42	0.58	0.16	496015.09	653479.98	N 32° 21' 45.65	W 103° 50' 10.55
	5844.00	1.10	254.17	5842.80	2473.80	0.00	-18.19	-1.27	0.39	496014.32	653478.13	N 32° 21' 45.64	W 103° 50' 10.57
	5939.00	0.84	307.41	5937.79	2568.79	1.44	-18.01	-2.70	0.95	496014.49	653476.70	N 32° 21' 45.65	W 103° 50' 10.59
	6034.00	1.29	325.83	6032.77	2663.77	2.69	-16.70	-3.85	0.59	496015.80	653475.55	N 32° 21' 45.66	W 103° 50' 10.60
	6128.00	1.42	308.33	6126.74	2757.74	4.30	-15.11	-5.36	0.46	496017.40	653474.04	N 32° 21' 45.68	W 103° 50' 10.62
	6223.00	1.32	318.11	6221.72	2852.72	6.06	-13.56	-7.01	0.27	496018.94	653472.39	N 32° 21' 45.69	W 103

Comments	MD (ft)	Incl (°)	Azin Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (ft)	Eastings (ft)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
	8209.00	0.29	210.92	8207.51	4838.51	29.11	-3.61	-29.43	0.93	496028.89	653449.97	N 32 21 45.79	W 103 50 10.90
	8301.00	1.03	234.64	8299.50	4839.50	29.86	-4.28	-30.23	0.84	496028.22	653449.18	N 32 21 45.78	W 103 50 10.91
	8435.00	-1.29	222.82	8433.48	5064.48	31.73	-6.09	-32.23	0.26	496026.41	653447.17	N 32 21 45.77	W 103 50 10.93
	8530.00	0.80	73.98	8528.47	5159.47	31.78	-6.69	-32.32	2.12	496025.81	653447.08	N 32 21 45.76	W 103 50 10.93
	8624.00	1.19	66.12	8622.46	5253.46	30.30	-6.11	-30.80	0.44	496026.39	653448.60	N 32 21 45.77	W 103 50 10.92
	8718.00	2.41	58.70	8716.41	5347.41	27.83	-4.69	-28.22	1.32	496027.81	653451.18	N 32 21 45.83	W 103 50 10.89
	8813.00	2.67	53.35	8811.31	5442.31	24.52	-2.33	-24.74	0.37	496030.17	653454.67	N 32 21 45.80	W 103 50 10.85
	8907.00	2.71	54.18	8905.21	5536.21	21.15	0.28	-21.18	0.06	496032.78	653458.22	N 32 21 45.83	W 103 50 10.80
	9002.00	2.47	57.99	9000.11	5631.11	17.76	2.68	-17.62	0.31	496035.17	653461.78	N 32 21 45.85	W 103 50 10.76
	9097.00	2.32	64.88	9095.03	5726.03	14.43	4.58	-14.14	0.34	496037.08	653465.26	N 32 21 45.87	W 103 50 10.72
	9191.00	1.86	91.00	9188.97	5819.97	11.24	5.36	-10.90	1.11	496037.86	653468.50	N 32 21 45.88	W 103 50 10.68
	9286.00	2.10	91.04	9283.91	5914.91	7.96	5.30	-7.61	0.25	496037.80	653471.79	N 32 21 45.88	W 103 50 10.65
	9381.00	1.53	120.79	9378.87	6009.87	5.09	4.62	-4.78	1.14	496037.12	653474.62	N 32 21 45.87	W 103 50 10.61
	9476.00	2.08	169.93	9473.83	6104.83	3.54	2.27	-3.39	1.67	496034.77	653476.01	N 32 21 45.85	W 103 50 10.60
	9570.00	2.48	185.73	9567.75	6198.75	3.23	-1.43	-3.33	0.82	496031.07	653476.07	N 32 21 45.81	W 103 50 10.60
	9665.00	1.30	234.75	9662.70	6293.70	4.16	-4.09	-4.45	1.98	496028.41	653474.95	N 32 21 45.78	W 103 50 10.61
	9760.00	1.06	286.93	9757.69	6388.69	5.85	-4.46	-6.18	1.12	496028.04	653473.22	N 32 21 45.78	W 103 50 10.63
	9855.00	2.06	308.34	9852.65	6483.65	8.12	-3.14	-8.36	1.20	496029.36	653471.05	N 32 21 45.79	W 103 50 10.65
	9950.00	2.38	316.39	9945.60	6578.60	10.32	-1.23	-10.43	0.61	496031.27	653468.97	N 32 21 45.81	W 103 50 10.68
	10045.00	2.34	321.41	9967.56	6673.56	11.54	0.07	-11.57	0.50	496032.57	653467.83	N 32 21 45.83	W 103 50 10.69
	10140.00	3.91	333.98	9999.51	6768.51	12.53	1.56	-12.45	5.32	496034.06	653466.95	N 32 21 45.84	W 103 50 10.70
	10235.00	7.44	342.80	10031.35	6863.35	13.83	4.52	-13.54	11.33	496037.02	653465.86	N 32 21 45.87	W 103 50 10.72
	10330.00	10.63	346.99	10061.96	6958.96	15.39	9.23	-14.78	10.50	496041.73	653464.62	N 32 21 45.92	W 103 50 10.73
	10425.00	13.57	349.07	10093.25	7054.25	17.21	15.79	-16.16	9.29	496048.29	653463.24	N 32 21 45.98	W 103 50 10.74
	10520.00	16.94	348.60	10123.15	7149.15	19.35	23.79	-17.74	10.88	496056.29	653461.66	N 32 21 46.06	W 103 50 10.76
	10615.00	19.85	348.76	10153.51	7244.51	22.01	33.69	-19.72	9.10	496066.19	653459.68	N 32 21 46.16	W 103 50 10.79
	10710.00	21.39	348.85	10183.46	7339.46	24.96	44.75	-21.91	4.81	496077.24	653457.49	N 32 21 46.27	W 103 50 10.81
	10805.00	23.17	348.85	10213.07	7434.07	28.13	56.65	-24.26	5.56	496089.14	653455.10	N 32 21 46.39	W 103 50 10.84
	10900.00	25.04	347.99	10241.37	7528.37	31.52	69.05	-26.80	6.14	496101.55	653452.60	N 32 21 46.51	W 103 50 10.87
	11000.00	27.50	346.48	10269.16	7622.16	35.48	82.43	-29.84	8.22	496114.92	653449.56	N 32 21 46.64	W 103 50 10.90
	11100.00	28.86	344.79	10297.37	7716.37	40.24	97.06	-33.59	4.93	496129.56	653445.81	N 32 21 46.79	W 103 50 10.94
	11200.00	29.02	344.28	10325.37	7809.37	45.40	111.99	-37.72	0.92	496144.48	653441.68	N 32 21 46.93	W 103 50 10.99
	11300.00	28.55	341.21	10352.55	7901.55	50.80	126.24	-42.15	5.00	496158.73	653437.26	N 32 21 47.08	W 103 50 11.04
	11400.00	28.34	344.07	10379.80	8000.80	56.17	140.33	-46.55	4.45	496172.82	653432.85	N 32 21 47.22	W 103 50 11.09
	11500.00	28.10	348.46	10408.00	8099.00	60.77	155.02	-50.14	6.53	496187.51	653429.26	N 32 21 47.38	W 103 50 11.13
	11600.00	29.97	349.94	10435.11	8196.11	64.60	169.80	-52.96	6.46	496202.29	653426.45	N 32 21 47.51	W 103 50 11.17
	11700.00	31.35	348.83	10461.77	8292.77	68.59	185.33	-55.87	4.81	496217.82	653423.53	N 32 21 47.66	W 103 50 11.20
	11800.00	33.03	347.62	10488.01	8388.01	73.08	201.50	-59.25	5.80	496233.98	653420.16	N 32 21 47.82	W 103 50 11.24
	11900.00	35.04	346.91	10514.52	8483.52	78.23	218.97	-63.20	6.40	496251.45	653416.21	N 32 21 47.99	W 103 50 11.28
	12000.00	37.62	347.74	10539.50	8578.50	83.49	236.88	-67.22	8.47	496269.37	653412.18	N 32 21 48.17	W 103 50 11.33
	12100.00	39.48	349.07	10564.52	8673.52	88.83	256.42	-71.22	6.36	496288.90	653408.18	N 32 21 48.36	W 103 50 11.37
	12200.00	40.72	346.97	10589.24	8768.24	94.33	275.95	-75.37	5.92	496308.43	653404.03	N 32 21 48.56	W 103 50 11.42
	12300.00	44.56	348.79	10614.49	8863.49	100.91	297.73	-80.45	11.95	496330.21	653398.95	N 32 21 48.77	W 103 50 11.48
	12400.00	49.17	342.51	10639.35	8958.35	108.66	320.25	-86.67	17.14	496352.72	653392.74	N 32 21 49.00	W 103 50 11.55
	12500.00	52.84	340.26	10663.85	9053.85	117.83	343.07	-94.37	13.11	496375.55	653385.04	N 32 21 49.22	W 103 50 11.64
	12600.00	56.08	341.42	10687.87	9148.87	127.63	366.89	-102.64	10.89	496399.37	653376.77	N 32 21 49.46	W 103 50 11.73
	12700.00	57.84	342.75	10711.77	9243.77	137.52	391.62	-110.63	6.74	496424.09	653368.78	N 32 21 49.70	W 103 50 11.83
	12800.00	58.57	343.09	10735.63	9338.63	147.26	417.62	-118.61	2.44	496448.09	653360.80	N 32 21 49.96	W 103 50 11.92
	12900.00	59.52	342.78	10759.57	9433.57	156.83	443.03	-126.41	3.18	496472.50	653352.99	N 32 21 50.21	W 103 50 12.01
	13000.00	61.91	342.79	10783.23	9528.23	166.92	469.69	-134.67	7.47	496496.16	653344.73	N 32 21 50.48	W 103 50 12.10
	13100.00	65.53	342.52	10807.39	9622.39	177.35	497.07	-143.23	11.34	496520.54	653336.18	N 32 21 50.75	W 103 50 12.20
	13200.00	68.03	343.04	10831.61	9716.61	187.65	524.28	-151.66	8.21	496545.75	653327.75	N 32 21 51.02	W 103 50 12.30
	13300.00	69.75	343.22	10855.14	9810.14	198.27	552.85	-160.32	5.40	496570.51	653319.09	N 32 21 51.30	W 103 50 12.40
	13400.00	72.64	341.89	10878.13	9903.13	208.99	580.84	-169.12	10.17	496595.30	653310.29	N 32 21 51.58	W 103 50 12.50
	13500.00	75.16	340.77	10900.40	10000.40	220.83	609.96	-178.96	8.56	496620.24	653300.45	N 32 21 51.87	W 103 50 12.61
	13600.00	76.21	339.08	10922.67	10097.67	233.07	638.18	-187.27	6.27	496645.63	653290.14	N 32 21 52.15	W 103 50 12.73
	13700.00	77.80	336.04	10944.89	10194.89	246.95	666.99	-196.18	10.51	496670.63	653278.24	N 32 21 52.43	W 103 50 12.87
	13800.00	79.81	333.24	10967.14	10292.14	261.84	694.46	-205.18	10.98	496695.92	653265.21	N 32 21 52.71	W 103 50 13.02
	13900.00	79.80	330.61	10989.40	10389.40	276.03	721.38	-214.20	8.35	496721.38	653252.05	N 32 21 52.97	W 103 50 13.18
	14000.00	78.96	326.77	11011.67	10486.67	290.20	748.25	-223.25	12.08	496747.25	653238.52	N 32 21 53.24	W 103 50 13.37
	14100.00	79.24	322.48	11103.33	10583.33	316.12	775.86	-232.25	13.19	496773.86	653224.99	N 32 21 53.51	W 103 50 13.58
	14200.00	79.87	319.61	11185.95	10680.95	336.88	797.57	-241.25	9.33	496800.01	653211.46	N 32 21 53.78	W 103 50 13.80
	14300.00	79.81	315.82	11268.59	10778.59	359.63	820.87	-250.25	11.66	496826.31	653197.97	N 32 21 54.05	W 103 50 14.05
	14400.00	79.18	312.15	11351.25	10876.25	382.98	842.03	-259.25	11.82	496852.47	653184.41	N 32 21 54.32	W 103 50 14.31
	14500.00	78.32	308.76	11433.90	10973.90	407.42	861.76	-268.25	11.08	496878.63	653170.88	N 32 21 54.59	W 103 50 14.57
	14600.00	78.04	305.42	11516.56	11071.56	432.65	880.64	-277.25	10.25	496904.79	653157.35	N 32 21 54.86	W 103 50 14.86
	14700.00	78.15	302.25	11599.21	11169.21	457.95	899.53	-286.25	10.01	496930.95	653143.82	N 32 21 55.13	W 103 50 15.16
	14800.00	77.87	299.66	11681.87	11266.87	483.26	918.42	-295.25	7.97	496957.11	653130.29	N 32 21 55.40	W 103 50 15.47
	14900.00	78.22	296.21	11764.52	11364.52	515.55	937.31	-304.25	10.95	496983.27	653116.76	N 32 21 55.67	W 103 50 15.78
	15000.00	79.42	293.45	11847.18	11462.18	544.89	956.20	-313.25	9.25	497009.43	653103.23	N 32 21 55.94	W 103 50 16.09
	15100.00	80.72	291.63	11929.84	11559.84	574.77	975.09	-322.25	6.92	497035.59	653089.70	N 32 21 56.21	W 103 50 16.40
	15200.00	81.34	28										

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100m)	Northing (ft)	Easting (ft)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
	15367.00	90.56	269.39	10913.75	7544.75	4338.71	1082.32	-4273.95	0.62	497114.75	648205.73	N 32 21 56.73	W 103 51 0.33
	15462.00	90.56	269.29	10912.82	7543.82	4433.40	1081.22	-4368.94	0.11	497113.65	649110.75	N 32 21 56.72	W 103 51 1.43
	15557.00	90.84	269.03	10911.66	7542.66	4528.05	1079.83	-4463.92	0.40	497112.26	649015.78	N 32 21 56.71	W 103 51 2.54
	15652.00	91.07	269.10	10910.08	7541.08	4622.69	1078.28	-4558.89	0.25	497110.71	648920.81	N 32 21 56.70	W 103 51 3.65
	15746.00	91.51	269.39	10907.96	7538.96	4716.35	1077.04	-4652.86	0.56	497109.47	648826.85	N 32 21 56.69	W 103 51 4.74
	15840.00	91.68	269.50	10905.35	7536.35	4810.02	1076.13	-4746.82	0.22	497108.56	648732.89	N 32 21 56.69	W 103 51 5.84
	15935.00	92.13	269.66	10902.19	7533.19	4904.69	1075.44	-4841.76	0.50	497107.87	648637.96	N 32 21 56.69	W 103 51 6.95
	16029.00	92.36	269.58	10898.51	7529.51	4988.34	1074.81	-4935.69	0.26	497107.24	648544.04	N 32 21 56.68	W 103 51 8.04
	16124.00	92.41	270.05	10894.55	7525.55	5093.01	1074.51	-5030.61	0.50	497106.94	648449.12	N 32 21 56.68	W 103 51 9.15
	16219.00	92.86	270.10	10890.19	7521.19	5187.69	1074.63	-5125.51	0.48	497107.06	648354.23	N 32 21 56.69	W 103 51 10.25
	16314.00	92.02	270.66	10886.14	7517.14	5282.41	1075.26	-5220.42	1.06	497107.69	648259.33	N 32 21 56.70	W 103 51 11.36
	16408.00	92.24	270.82	10882.65	7513.65	5376.20	1076.47	-5314.34	0.29	497108.90	648165.41	N 32 21 56.72	W 103 51 12.46
	16503.00	92.36	270.54	10878.84	7509.84	5470.97	1077.60	-5409.26	0.32	497110.03	648070.50	N 32 21 56.73	W 103 51 13.56
	16597.00	92.97	271.01	10874.46	7505.46	5564.72	1078.87	-5503.15	0.82	497111.30	647976.61	N 32 21 56.75	W 103 51 14.66
	16692.00	94.85	271.40	10868.57	7499.57	5659.42	1080.86	-5597.94	1.31	497113.29	647881.83	N 32 21 56.77	W 103 51 15.76
	16781.00	93.65	271.78	10862.51	7493.51	5748.14	1083.33	-5687.70	0.78	497115.76	647793.07	N 32 21 56.80	W 103 51 16.86
	16876.00	90.62	269.45	10858.97	7489.97	5842.89	1084.35	-5781.61	4.02	497116.77	647698.17	N 32 21 56.81	W 103 51 17.90
	16971.00	86.75	266.57	10861.15	7492.15	5937.32	1081.05	-5876.50	0.08	497115.48	647603.28	N 32 21 56.79	W 103 51 19.01
	17065.00	87.03	263.41	10866.25	7487.25	6030.02	1072.85	-5969.99	3.37	497105.28	647509.80	N 32 21 56.71	W 103 51 20.10
	17160.00	86.97	265.64	10871.23	7502.23	6123.60	1063.80	-6064.43	2.35	497096.23	647415.37	N 32 21 56.62	W 103 51 21.20
	17255.00	87.14	268.27	10876.11	7507.11	6217.75	1058.76	-6159.16	2.77	497091.19	647320.65	N 32 21 56.58	W 103 51 22.31
	17349.00	87.03	267.82	10880.89	7511.89	6311.13	1055.56	-6252.98	0.49	497087.99	647226.83	N 32 21 56.55	W 103 51 23.40
	17444.00	87.03	269.78	10885.81	7516.81	6405.61	1053.57	-6347.83	2.06	497086.01	647131.99	N 32 21 56.54	W 103 51 24.51
	17538.00	88.26	269.84	10889.72	7520.72	6500.27	1053.26	-6442.75	1.30	497085.69	647037.08	N 32 21 56.54	W 103 51 25.61
	17633.00	87.87	269.61	10892.89	7523.89	6593.96	1052.81	-6536.69	0.48	497085.24	646943.14	N 32 21 56.54	W 103 51 26.71
	17727.00	88.54	269.89	10895.83	7526.83	6687.66	1052.40	-6630.64	0.77	497084.83	646849.19	N 32 21 56.54	W 103 51 27.80
	17822.00	88.49	270.02	10898.30	7529.30	6782.39	1052.32	-6725.61	0.15	497084.75	646754.23	N 32 21 56.54	W 103 51 28.91
	17917.00	89.55	269.60	10899.92	7530.92	6877.13	1052.01	-6820.59	1.20	497084.44	646659.26	N 32 21 56.54	W 103 51 30.02
	18012.00	89.50	270.27	10900.71	7531.71	6971.89	1051.90	-6915.59	0.71	497084.33	646564.27	N 32 21 56.54	W 103 51 31.13
	18106.00	90.06	270.18	10901.07	7532.07	7065.68	1052.27	-7009.59	0.60	497084.70	646470.27	N 32 21 56.55	W 103 51 32.22
	18200.00	90.17	269.81	10900.88	7531.88	7159.46	1052.26	-7103.59	0.41	497084.69	646376.28	N 32 21 56.56	W 103 51 33.32
	18294.00	90.11	270.05	10900.65	7531.65	7253.22	1052.15	-7197.59	0.26	497084.58	646282.29	N 32 21 56.56	W 103 51 34.41
	18389.00	90.11	269.72	10900.47	7531.47	7347.98	1051.96	-7292.59	0.35	497084.39	646187.29	N 32 21 56.56	W 103 51 35.52
	18484.00	90.17	269.52	10900.24	7531.24	7442.71	1051.33	-7387.59	0.22	497083.76	646092.30	N 32 21 56.56	W 103 51 36.63
	18578.00	90.00	269.69	10900.10	7531.10	7536.43	1050.68	-7481.58	0.26	497083.11	645998.31	N 32 21 56.56	W 103 51 37.72
	18674.00	90.06	270.23	10900.05	7531.05	7632.20	1050.61	-7577.58	0.57	497083.04	645902.32	N 32 21 56.56	W 103 51 38.84
	18768.00	90.11	269.73	10899.91	7530.91	7725.97	1050.58	-7671.58	0.53	497083.01	645808.32	N 32 21 56.56	W 103 51 39.94
	18863.00	90.06	270.08	10899.77	7530.77	7820.73	1050.42	-7766.58	0.37	497082.85	645713.33	N 32 21 56.57	W 103 51 41.05
	18957.00	90.17	269.80	10899.58	7530.58	7914.49	1050.32	-7860.58	0.32	497082.75	645619.34	N 32 21 56.57	W 103 51 42.14
	19051.00	90.11	269.40	10899.35	7530.35	8008.22	1049.67	-7954.58	0.43	497082.10	645525.35	N 32 21 56.57	W 103 51 43.24
	19146.00	90.28	269.54	10899.02	7530.02	8102.92	1048.79	-8049.57	0.23	497081.22	645430.36	N 32 21 56.56	W 103 51 44.35
	19240.00	90.17	269.27	10898.66	7529.66	8196.62	1047.81	-8143.57	0.31	497080.24	645336.37	N 32 21 56.56	W 103 51 45.44
	19335.00	90.28	269.31	10898.28	7529.28	8291.31	1046.63	-8238.56	0.12	497079.07	645241.38	N 32 21 56.55	W 103 51 46.55
	19430.00	90.39	269.15	10897.73	7528.73	8385.98	1045.36	-8333.55	0.20	497077.79	645146.40	N 32 21 56.54	W 103 51 47.66
	19525.00	90.34	269.22	10897.12	7528.12	8480.65	1044.01	-8428.54	0.09	497076.44	645051.42	N 32 21 56.53	W 103 51 48.76
	19619.00	90.95	269.40	10896.06	7527.06	8574.33	1042.87	-8522.52	0.68	497075.31	644957.44	N 32 21 56.52	W 103 51 49.86
	19713.00	90.79	269.57	10894.64	7525.64	8668.03	1042.03	-8616.51	0.25	497074.46	644863.46	N 32 21 56.52	W 103 51 50.96
	19808.00	90.56	269.71	10893.52	7524.52	8762.72	1041.43	-8711.50	0.78	497073.86	644769.47	N 32 21 56.52	W 103 51 52.06
	19903.00	90.39	270.23	10892.73	7523.73	8857.51	1041.38	-8806.50	0.58	497073.61	644673.48	N 32 21 56.52	W 103 51 53.17
	19998.00	90.22	270.75	10892.22	7523.22	8952.34	1042.20	-8901.49	0.58	497074.63	644578.49	N 32 21 56.53	W 103 51 54.28
	20092.00	89.89	270.87	10892.13	7523.13	9046.19	1043.52	-8995.48	0.37	497075.96	644484.51	N 32 21 56.55	W 103 51 55.37
	20187.00	89.61	270.63	10892.55	7523.55	9141.04	1044.77	-9090.47	0.39	497077.20	644389.53	N 32 21 56.57	W 103 51 56.48
	20282.00	90.17	271.40	10892.73	7523.73	9235.91	1046.45	-9185.46	1.00	497078.88	644294.55	N 32 21 56.59	W 103 51 57.59
	20376.00	90.50	271.29	10892.18	7523.18	9329.81	1048.66	-9279.43	0.37	497081.09	644200.58	N 32 21 56.61	W 103 51 58.68
	20470.00	90.62	271.10	10891.26	7522.26	9423.70	1050.62	-9373.41	0.24	497083.05	644106.61	N 32 21 56.64	W 103 51 59.78
	20565.00	90.50	270.88	10890.33	7521.33	9518.56	1052.26	-9468.39	0.26	497084.69	644011.64	N 32 21 56.66	W 103 52 0.89
	20660.00	90.34	271.09	10889.64	7520.64	9613.43	1053.89	-9563.37	0.28	497086.32	643916.66	N 32 21 56.68	W 103 52 1.99
	20754.00	90.50	271.90	10888.95	7519.95	9707.34	1056.34	-9657.33	0.88	497088.77	643822.70	N 32 21 56.71	W 103 52 3.09
	20849.00	90.73	270.13	10887.93	7518.93	9802.20	1058.03	-9752.31	1.88	497090.46	643727.73	N 32 21 56.73	W 103 52 4.20
	20943.00	90.34	269.64	10887.05	7518.05	9895.96	1057.84	-9846.31	0.67	497090.27	643633.74	N 32 21 56.73	W 103 52 5.29
	21037.00	90.45	269.97	10886.40	7517.40	9989.71	1057.52	-9940.30	0.37	497089.95	643539.75	N 32 21 56.73	W 103 52 6.39
	21132.00	90.73	270.11	10885.42	7516.42	10084.48	1057.59	-10035.30	0.33	497090.02	643444.76	N 32 21 56.74	W 103 52 7.50
	21227.00	90.28	270.39	10884.59	7515.59	10179.27	1058.00	-10130.29	0.56	497090.43	643349.78	N 32 21 56.74	W 103 52 8.60
	21322.00	90.45	269.78	10883.98	7514.98	10274.05	1058.14	-10225.29	0.67	497090.57	643254.78	N 32 21 56.75	W 103 52 9.71
	21416.00	90.56	270.51	10883.15	7514.15	10367.84	1058.38	-10319.29	0.79	497090.81	643160.80	N 32 21 56.76	W 103 52 10.81
	21511.00	90.34	269.82	10882.41	7513.41	10462.62	1058.65	-10414.28	0.76	497091.08	643065.81	N 32 21 56.76	W 103 52 11.91
	21605.00	90.00	270.24	10882.13	7513.13	10556.40	1058.70	-10508.28	0.57	497091.13	642971.81	N 32 21 56.77	W 103 52 13.01
	21700.00	90.06	269.68	10882.08	7513.08	10651.17	1058.63	-10603.28	0.59	497091.07	642876.82	N 32 21 56.77	W 103 52 14.12
	21795.00	90.06	270.09	10881.98	7512.98	10745.92	1058.44	-10698.28	0.43	497090.87	642781.83	N 32 21 56.77	W 103 5

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
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Survey Type: Def Survey

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma

Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	25.000	1/98.425	17.500	13.375	NAL_MWD-NON_SLB-Depth Only	Original Borehole / XTO James Ranch Unit DI 2 #192H MWD 0ft to 26130ft MD
	1	25.000	25.000	Act Stns	17.500	13.375	NAL_MWD-NON_SLB-Depth Only	Original Borehole / XTO James Ranch Unit DI 2 #192H MWD 0ft to 26130ft MD
	1	25.000	672.000	Act Stns	17.500	13.375	NAL_MWD-NON_SLB	Original Borehole / XTO James Ranch Unit DI 2 #192H MWD 0ft
	1	672.000	8362.000	Act Stns	12.250	9.625	NAL_MWD_1.0_DEG	Original Borehole / XTO James Ranch Unit DI 2 #192H MWD 0ft
	1	8362.000	26130.000	Act Stns	8.750	7.000	NAL_MWD_1.0_DEG	Original Borehole / XTO James Ranch Unit DI 2 #192H MWD 0ft

...Original BoreholeXTO James Ranch Unit DI 2 #192H MWD 0ft to 26130ft MD