

Results of Directional Survey

API number:	30-025-24851		
OGRID:		Operator:	XTO ENERGY INC
		Property:	NORTH VAVUUM ABO UNIT # 222

surface	ULSTR:	I	24	T	17S	R	34E
			2100	FSL	660	FEL	

BH Loc	ULSTR:	O	24	T	17S	R	34E
			1293	FSL	2112	FEL	

	MD	N/S	E/W	VD
	8300	-29.60	-63.64	8298.91
TOP PERFS/OH	8349	-31.41	-66.26	8347.79
	8380	-32.56	-67.91	8378.72
	10019	-785.88	-1414.82	8498.06
BOT PERFS/OH	10062	-806.55	-1452.49	8496.67
	10062	-806.55	-1452.49	8496.67

NEXT TO LAST	10019	-785.88	-1414.82	8498.06
LAST READING	10062	-806.55	-1452.49	8496.67
TD	10062	-806.55	-1452.49	8496.67

Surface Location	2100	FS	660	FE
Projected BHL	1293	FS	2112	FE
Location of				
Top Perfs/OH	2069	FS	726	FE
Bottom Perfs/OH	1293	FS	2112	FE

SUMMARY of Subsurface Locations

Surface Location	I-24-17S-34E	2100	FS	660	FE	Vert. Depth
Top Perfs/OH	I-24-17S-34E	2069	FS	726	FE	8347.79
Bottom Perfs/OH	O-24-17S-34E	1293	FS	2112	FE	8496.67
Projected TD	O-24-17S-34E	1293	FS	2112	FE	8496.67



Actual Wellpath Report

#222H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	XTO Energy Inc.	Slot	#222H SHL
Area	Lea County, NM	Well	#222H
Field	North Vacuum Abo	Wellbore	#222H AWB (LAT.)
Facility	NVAU #222H	Sidetrack from	#222H AWB at 8300.00 MD

REPORT SETUP INFORMATION

Projection System	NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect™ 1.2
North Reference	Grid	User	Victor Hernandez
Scale	0.999983	Report Generated	10/15/07 at 10:43:05
Wellbore last revised	10/09/07	Database/Source file	WA_Midland/#222H_AWB

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North [feet]	East [feet]	Easting [US feet]	Northing [US feet]	Latitude [°]	Longitude [°]
Slot Location	0.00	0.00	753820.50	662655.30	32 49 08.401N	103 30 25.658W
Facility Reference Pt			753820.50	662655.30	32 49 08.401N	103 30 25.658W
Field Reference Pt			743305.80	659615.20	32 48 39.117N	103 32 29.129W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on #222H SHL (RT) to Facility Vertical Datum	17.00 feet
Horizontal Reference Pt	Facility Center	Rig on #222H SHL (RT) to GRN. ELEV.	4017.00 feet
Vertical Reference Pt	Rig on #222H SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00 feet
MD Reference Pt	Rig on #222H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	GRN. ELEV.	Section Azimuth	241.60°

SUR: I-24-17s-34e, 2100/S & 660/E
BHL: O-24-17s-34e, 1293/S & 2112/E
API # 30-025-24851



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Area	Lea County, NM	Well	#222H
Field	North Vacuum Abo	Wellbore	#222H AWB (LAT.)
Facility	NVAU #222H	Sidetrack from	#222H AWB at 8300.00 MD

WELLPATH DATA (148 stations)

MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]	Path Comment
0.00	0.000	0.000	0.00	0.00	0.00	0.00	0.00	
100.00	0.230	159.880	100.00	0.03	-0.19	0.07	0.23	
200.00	0.280	154.600	200.00	0.07	-0.60	0.24	0.06	
300.00	0.280	159.370	300.00	0.12	-1.05	0.43	0.02	
400.00	0.270	161.080	400.00	0.19	-1.50	0.60	0.01	
500.00	0.230	182.230	500.00	0.33	-1.92	0.66	0.10	
600.00	0.300	157.340	599.99	0.46	-2.36	0.76	0.13	
700.00	0.550	143.110	699.99	0.41	-2.99	1.15	0.27	
800.00	0.570	143.830	799.99	0.27	-3.78	1.73	0.02	
900.00	0.640	146.380	899.98	0.16	-4.64	2.33	0.07	
1000.00	0.460	150.470	999.98	0.10	-5.46	2.84	0.18	
1100.00	0.600	163.570	1099.97	0.20	-6.31	3.18	0.18	
1200.00	0.490	182.290	1199.97	0.53	-7.24	3.32	0.21	
1300.00	0.420	205.800	1299.96	1.04	-7.99	3.14	0.20	
1400.00	0.380	206.960	1399.96	1.61	-8.62	2.83	0.04	
1500.00	0.390	227.240	1499.96	2.21	-9.15	2.43	0.14	
1600.00	0.340	254.020	1599.96	2.83	-9.46	1.89	0.18	
1700.00	0.490	239.710	1699.96	3.55	-9.76	1.24	0.18	
1800.00	0.560	254.290	1799.95	4.45	-10.10	0.40	0.15	
1900.00	0.600	260.830	1899.95	5.43	-10.32	-0.59	0.08	
2000.00	0.720	276.480	1999.94	6.44	-10.33	-1.73	0.22	
2100.00	0.470	299.950	2099.93	7.17	-10.06	-2.71	0.34	
2200.00	0.280	292.120	2199.93	7.54	-9.76	-3.29	0.20	
2300.00	0.210	190.700	2299.93	7.81	-9.85	-3.55	0.38	
2400.00	0.280	177.090	2399.93	8.03	-10.27	-3.57	0.09	
2500.00	0.260	177.460	2499.93	8.23	-10.74	-3.55	0.02	
2600.00	0.310	113.520	2599.93	8.16	-11.08	-3.29	0.30	
2700.00	0.690	69.890	2699.92	7.40	-10.98	-2.48	0.51	
2800.00	1.140	58.740	2799.91	5.81	-10.26	-1.06	0.48	
2900.00	1.240	60.880	2899.89	3.74	-9.21	-0.73	0.11	
3000.00	1.230	66.190	2999.87	1.59	-8.25	2.66	0.11	
3100.00	1.030	70.370	3099.85	-0.37	-7.52	4.49	0.22	
3200.00	0.520	84.950	3199.84	-1.68	-7.18	5.79	0.54	
3300.00	0.330	100.870	3299.84	-2.32	-7.19	6.52	0.22	
3400.00	0.260	179.450	3399.83	-2.43	-7.47	6.81	0.38	
3500.00	0.430	199.720	3499.83	-2.05	-8.05	6.68	0.21	
3600.00	0.550	207.380	3599.83	-1.37	-8.83	6.34	0.14	
3700.00	0.670	212.740	3699.82	-0.46	-9.75	5.80	0.13	
3800.00	0.860	220.710	3799.81	0.75	-10.81	4.99	0.22	
3900.00	1.010	227.670	3899.80	2.31	-11.97	3.85	0.19	



Actual Wellpath Report

#222H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	XTO Energy Inc.	Slot	#222H SHL
Area	Lea County, NM	Well	#222H
Field	North Vacuum Abo	Wellbore	#222H AWP (LAT.)
Facility	NVAU #222H	Sidetrack from	#222H AWP at 8300.00 MD

WELLPATH DATA (148 stations)

MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]	Path Comment
4000.00	1.110	226.620	3999.78	4.10	-13.23	2.50	0.10	
4100.00	1.160	230.680	4099.76	6.03	-14.54	1.01	0.09	
4200.00	1.170	232.780	4199.74	8.03	-15.80	-0.59	0.04	
4300.00	1.330	225.870	4299.72	10.16	-17.22	-2.23	0.22	
4400.00	1.410	226.560	4399.69	12.46	-18.88	-3.96	0.08	
4500.00	1.360	231.960	4499.66	14.82	-20.45	-5.79	0.14	
4600.00	1.310	232.320	4599.64	17.12	-21.88	-7.63	0.05	
4700.00	1.170	222.510	4699.61	19.21	-23.33	-9.22	0.25	
4800.00	1.030	224.020	4799.59	21.03	-24.73	-10.54	0.14	
4900.00	0.900	220.240	4899.58	22.62	-25.98	-11.67	0.14	
5000.00	0.980	221.060	4999.57	24.15	-27.22	-12.74	0.08	
5100.00	0.990	222.810	5099.55	25.77	-28.50	-13.89	0.03	
5200.00	0.870	236.180	5199.54	27.34	-29.56	-15.10	0.25	
5300.00	0.890	234.020	5299.53	28.87	-30.44	-16.36	0.04	
5400.00	0.970	234.280	5399.51	30.48	-31.39	-17.68	0.08	
5500.00	1.120	237.230	5499.50	32.29	-32.41	-19.19	0.16	
5600.00	1.130	225.910	5599.48	34.22	-33.63	-20.72	0.22	
5700.00	1.230	221.110	5699.46	36.17	-35.12	-22.13	0.14	
5800.00	1.150	225.950	5799.43	38.14	-36.63	-23.56	0.13	
5900.00	0.740	237.740	5899.42	39.75	-37.67	-24.83	0.45	
6000.00	0.720	236.890	5999.41	41.02	-38.36	-25.90	0.02	
6100.00	0.650	267.660	6099.41	42.16	-38.72	-26.99	0.37	
6200.00	0.580	288.790	6199.40	43.01	-38.58	-28.04	0.24	
6300.00	0.380	324.030	6299.40	43.40	-38.15	-28.71	0.35	
6400.00	0.470	325.780	6399.39	43.49	-37.54	-29.14	0.09	
6500.00	0.480	318.440	6499.39	43.62	-36.89	-29.64	0.06	
6600.00	0.620	328.210	6599.39	43.75	-36.12	-30.21	0.17	
6700.00	0.620	326.170	6699.38	43.83	-35.21	-30.79	0.02	
6800.00	0.690	317.820	6799.37	44.03	-34.31	-31.50	0.12	
6900.00	0.940	311.710	6899.36	44.45	-33.32	-32.52	0.26	
7000.00	1.050	303.870	6999.35	45.16	-32.27	-33.89	0.17	
7100.00	1.060	290.350	7099.33	46.19	-31.43	-35.52	0.25	
7200.00	1.100	289.660	7199.31	47.44	-30.79	-37.29	0.04	
7300.00	1.180	295.050	7299.29	48.70	-30.03	-39.12	0.13	
7400.00	1.410	313.350	7399.27	49.70	-28.75	-40.95	0.47	
7500.00	1.060	302.640	7499.25	50.53	-27.41	-42.63	0.42	
7600.00	1.930	321.450	7599.21	51.28	-25.59	-44.45	0.99	
7700.00	1.140	268.260	7699.18	52.46	-24.30	-46.50	1.55	
7800.00	1.870	245.700	7799.14	54.98	-25.00	-48.98	0.93	
7900.00	1.870	251.680	7899.09	58.21	-26.19	-52.02	0.20	



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Field	North Vacuum Abo	Wellbore	#222H AWB (LAT.)
Facility	NVAU #222H	Sidetrack from	#222H AWB at 8300.00 MD

WELLPATH DATA (148 stations)

MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]	Path Comment
8000.00	1.660	249.500	7999.04	61.25	-27.21	-54.92	0.22	
8100.00	1.740	250.900	8099.00	64.19	-28.21	-57.71	0.09	
8200.00	1.750	258.150	8198.95	67.15	-29.02	-60.64	0.22	
8300.00	1.750	260.040	8298.91	70.06	-29.60	-63.64	0.06	
8380.00	5.900	228.100	8378.72	75.22	-32.56	-67.91	5.64	
8395.00	9.900	249.900	8393.58	77.25	-33.52	-69.69	32.87	
8412.00	14.200	252.700	8410.20	80.74	-34.64	-73.06	25.52	
8426.00	17.700	251.600	8423.66	84.52	-35.82	-76.72	25.09	
8443.00	20.900	252.300	8439.70	90.05	-37.56	-82.06	18.87	
8458.00	25.900	254.800	8453.46	95.87	-39.24	-87.77	33.98	
8475.00	31.200	252.300	8468.39	103.82	-41.55	-95.56	31.95	
8491.00	37.500	252.000	8481.59	112.69	-44.32	-104.14	39.39	
8506.00	43.400	250.600	8493.00	122.28	-47.44	-113.36	39.79	
8522.00	50.000	249.900	8503.97	133.78	-51.38	-124.31	41.37	
8536.00	55.100	246.700	8512.48	144.82	-55.50	-134.62	40.69	
8551.00	60.300	243.900	8520.49	157.46	-60.80	-146.13	38.08	
8568.00	67.200	247.400	8528.01	172.66	-67.07	-160.02	44.58	
8583.00	70.400	240.700	8533.44	186.62	-73.19	-172.58	46.78	
8597.00	75.800	240.000	8537.51	200.01	-79.82	-184.22	38.87	
8612.00	79.500	237.900	8540.72	214.64	-87.37	-196.77	28.20	
8629.00	81.000	238.300	8543.59	231.36	-96.23	-210.99	9.12	
8644.00	83.400	236.100	8545.63	246.18	-104.28	-223.48	21.61	
8660.00	85.900	237.900	8547.12	262.06	-112.95	-236.84	19.22	
8675.00	87.900	237.600	8547.93	277.00	-120.94	-249.50	13.48	
8692.00	89.500	236.100	8548.32	293.94	-130.24	-263.73	12.90	
8724.00	89.300	235.400	8548.65	325.77	-148.25	-290.18	2.27	
8755.00	89.700	235.400	8548.92	356.58	-165.85	-315.70	1.29	
8787.00	92.200	235.400	8548.39	388.39	-184.02	-342.03	7.81	
8818.00	92.800	236.100	8547.04	419.20	-201.45	-367.63	2.97	
8850.00	93.100	242.800	8545.39	451.12	-217.68	-395.14	20.93	
8882.00	92.300	239.700	8543.89	483.08	-233.05	-423.16	9.99	
8914.00	93.300	240.400	8542.32	515.03	-249.01	-450.85	3.81	
8945.00	92.500	239.700	8540.75	545.97	-264.47	-477.68	3.43	
8977.00	90.500	240.000	8539.92	577.95	-280.53	-505.34	6.32	
9009.00	91.200	240.700	8539.44	609.93	-296.36	-533.14	3.09	
9041.00	91.500	240.000	8538.69	641.92	-312.19	-560.95	2.38	
9072.00	92.100	239.300	8537.71	672.88	-327.84	-587.68	2.97	
9103.00	91.500	238.600	8536.74	703.84	-343.82	-614.23	2.97	
9135.00	90.700	236.800	8536.13	735.75	-360.92	-641.27	6.15	
9166.00	92.100	237.600	8535.37	766.65	-377.71	-667.32	5.20	



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WELLPATH DATA (148 stations)

MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]	Path Comment
9198.00	93.200	237.200	8533.89	798.53	-394.93	-694.25	3.66	
9228.00	93.600	237.200	8532.11	828.39	-411.15	-719.42	1.33	
9260.00	93.000	238.600	8530.27	860.27	-428.13	-746.48	4.75	
9291.00	92.200	239.300	8528.86	891.20	-444.10	-773.01	3.43	
9323.00	92.500	240.000	8527.55	923.16	-460.25	-800.60	2.38	
9355.00	93.600	244.900	8525.85	955.10	-475.03	-828.93	15.67	
9385.00	92.600	241.400	8524.22	985.04	-488.56	-855.65	12.12	
9417.00	92.400	241.400	8522.83	1017.01	-503.86	-883.72	0.62	
9449.00	92.400	241.100	8521.49	1048.98	-519.24	-911.75	0.94	
9480.00	91.400	240.000	8520.46	1079.96	-534.47	-938.73	4.79	
9512.00	93.500	243.500	8519.09	1111.92	-549.60	-966.88	12.75	
9544.00	92.500	242.500	8517.42	1143.87	-564.11	-995.36	4.42	
9575.00	92.800	244.600	8515.98	1174.81	-577.90	-1023.08	6.84	
9606.00	92.200	242.100	8514.63	1205.77	-591.79	-1050.76	8.29	
9638.00	92.200	242.100	8513.40	1237.74	-606.76	-1079.02	0.00	
9670.00	92.000	244.600	8512.23	1269.70	-621.10	-1107.60	7.83	
9702.00	90.700	241.100	8511.47	1301.68	-635.69	-1136.06	11.66	
9733.00	92.200	241.400	8510.69	1332.67	-650.60	-1163.23	4.93	
9765.00	92.600	241.800	8509.35	1364.64	-665.81	-1191.35	1.77	
9797.00	91.000	239.700	8508.35	1396.62	-681.43	-1219.25	8.25	
9828.00	93.300	241.400	8507.18	1427.59	-696.66	-1246.23	9.22	
9860.00	93.700	241.400	8505.23	1459.53	-711.95	-1274.27	1.25	
9892.00	92.900	243.200	8503.39	1491.47	-726.80	-1302.55	6.15	
9924.00	91.100	242.800	8502.27	1523.44	-741.32	-1331.05	5.76	
9955.00	93.000	242.800	8501.16	1554.41	-755.48	-1358.60	6.13	
9987.00	93.700	241.800	8499.29	1586.36	-770.33	-1386.88	3.81	
10019.00	90.700	240.000	8498.06	1618.33	-785.88	-1414.82	10.93	
10062.00	93.000	242.500	8496.67	1661.30	-806.55	-1452.49	7.90	Proj. To Bit

TARGETS

Name	MD [feet]	TVD [feet]	North [feet]	East [feet]	Grid East [us survey feet]	Grid North [us survey feet]	Latitude [°]	Longitude [°]	Shape
#222H BHL		8496.00	-792.32	-1465.43	752355.10	661863.00	32 49 00.675N	103 30 42.901W	point

WELLPATH COMPOSITION Ref Wellbore: #222H AWB (LAT.) Ref Wellpath: #222H AWP

Start MD [feet]	End MD [feet]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	8300.00	Generic gyro - northseeking (Standard)	Gyro	#222H AWB
8300.00	10062.00	NaviTrak (Standard)	MWD	#222H AWB (LAT.)



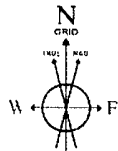
XTO Energy Inc.

Location: Lea County, NM
Field: North Vacuum Abo
Facility: NVAU #222H

Slot: #222H SHL
Well: #222H
Wellbore: #222H AWB (LAT)



Plot reference wellpath is #222H AWP	
True vertical depths are referenced to Rig on #222H SHL (RT)	Grid System: NAD83 / TM New Mexico State Plane, Eastern Zone (3001) US feet
Measured depths are referenced to Rig on #222H SHL (RT)	North Reference: Grid north
Rig on #222H SHL (RT) to GRN ELEV 4017 feet	Scale: True distance
GRN ELEV in Mud line (Facility: NVAU #222H) 4000 feet	Depths are in feet
Coordinates are in feet referenced to Facility Center	Created by: htwrc on 10/15/2007



BGGM (1945.0 to 2008.0) Dip: 60.87° Field: 48435.5 nT
Magnetic North is 8.06 degrees East of True North (at 09/27/07)
Grid North is 0.45 degrees East of True North
To correct azimuth from True to Grid subtract 0.45 degrees
To correct azimuth from Magnetic to Grid add 7.63 degrees

