

AUG 12 2013

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

Form C-102

Revised August 1, 2013

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-29038	² Pool Code 72319/71599	³ Pool Name BLANCO MESAVERDE/BASIN DAKOTA
⁴ Property Code 33460	⁵ Property Name JICARILLA B	⁶ Well Number 3R
⁷ OGRID No. 143199	⁸ Operator Name ENERVEST OPERATING, LLC.	⁹ Elevation 6610'

¹⁰Surface Location

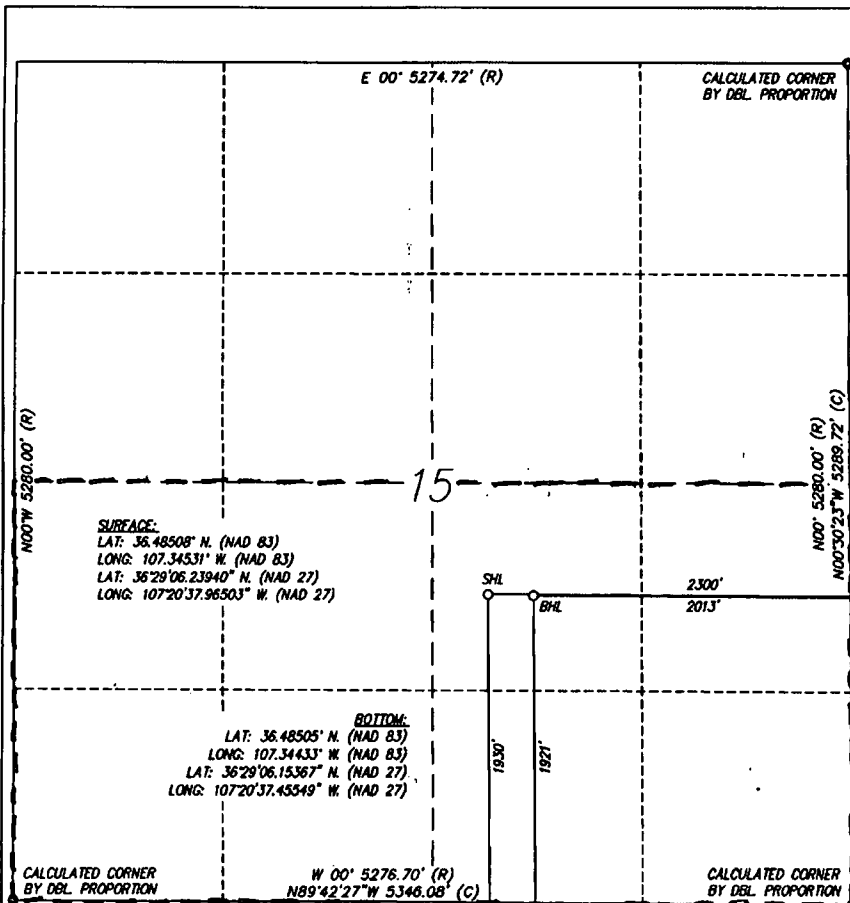
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	15	26-N	5-W		1930	SOUTH	2300	EAST	RIO ARriba

¹¹Bottom 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
J	15	26-N	5-W		1921	SOUTH	2013	EAST	RIO ARriba

¹² Dedicated Acres MV - S/320 DK - S/320	¹³ Joint of 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.

¹⁷OPERATOR 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: *Bart Treviño* Date: 8/12/13

Printed Name: BART TREVIÑO

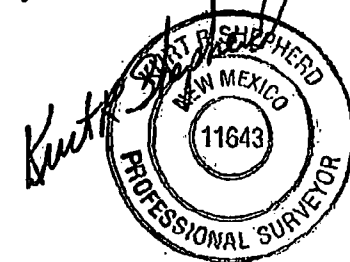
E-mail Address: BTREVIÑO@ENERVEST.NGT

¹⁸SURVEYOR 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.

Survey Date: AUGUST 2, 2013

Signature and Seal of Professional Surveyor



Certificate Number 11643

AV



Scientific Drilling

Directional Survey Certification

2948 I-70 Business Loop
Grand Junction, CO 81504
(970)-245-9447 Fax (970)-245-9454

RCVD AUG 8 '13
OIL CONS. DIV.
DIST. 3

RE:	<u>Enervest</u>	Operator
	<u>Jicarilla B #3R</u>	Well Name & No.
	<u>Rio Arriba County, NM</u>	County & State
	<u>330513DEF14845</u>	SDI Job No.

I, Janie Collins, having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 615 feet to a measured depth of 7710 feet is true and correct as determined from all available records.

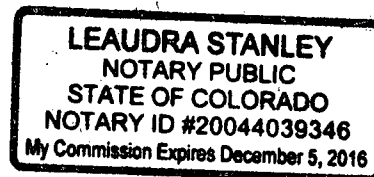

Signature

Colorado District Well Planner
Title

Scientific Drilling International
Company

State of : Colorado }
County of : Mesa }

ss



On this 11th day of July, 2013, before me personally appeared Janie Collins to me known as the person described in and who executed the foregoing instrument and acknowledged that (s)he executed the same as his/her free act and deed.

Seal


Notary Public

12/5/16
My Commission Expires

RCVD AUG 8

OIL CONS.

DIST. 3

EnerVest Operating LLC

Rio Arriba County, NM (NAD83)

Jicarilla

Jicarilla B #3R

OH

Design: OH

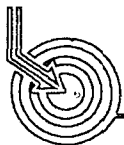
Standard Survey Report

11 July, 2013



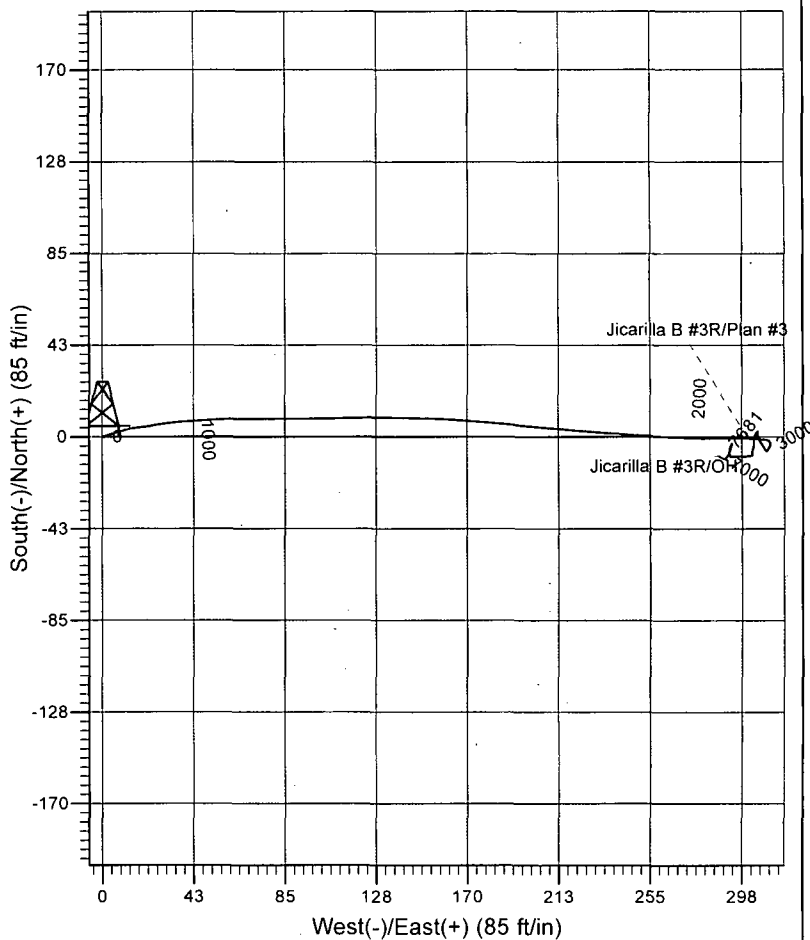
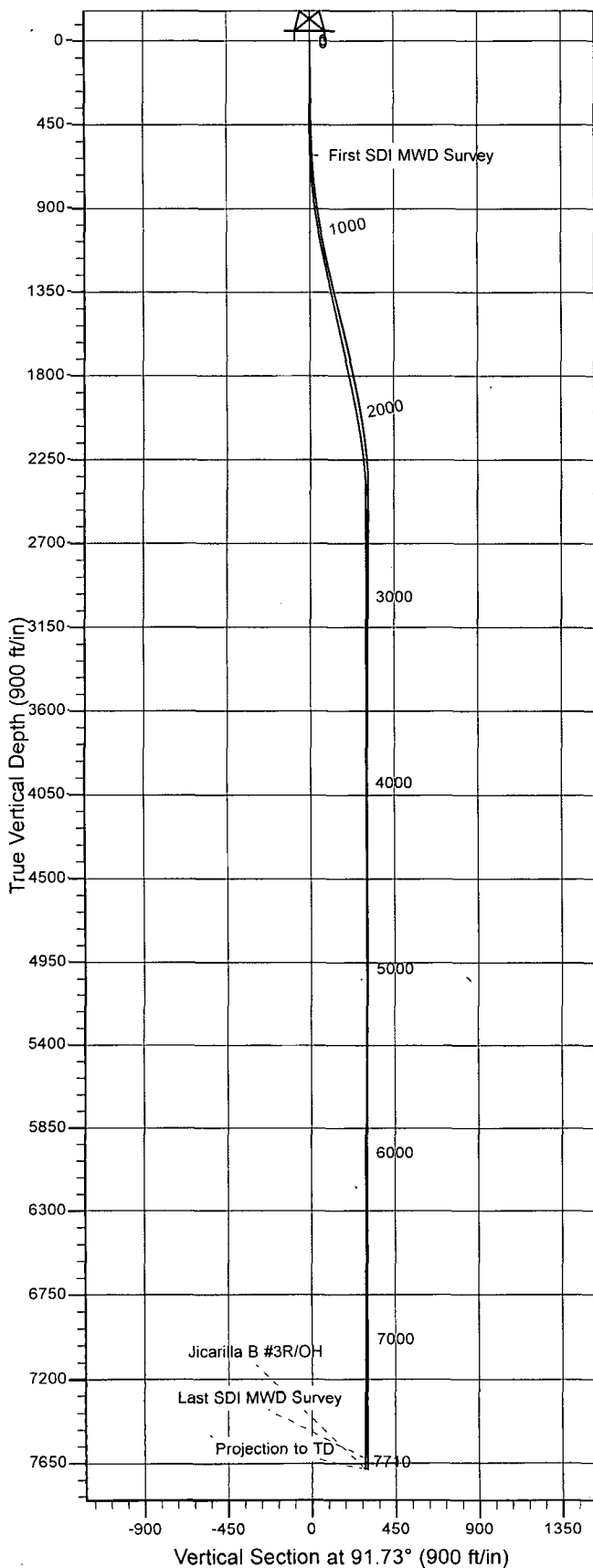
Scientific Drilling

www.scientificdrilling.com



Scientific Drilling

Company: EnerVest Operating LLC
Project: Rio Arriba County, NM (NAD83)
Site: Jicarilla
Well: Jicarilla B #3R
Wellbore: OH
Design: OH



Well Details: Jicarilla B #3R

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	3090091.86	1331286.10	39° 29' 6.288 N	107° 20' 43.116 W	

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Jicarilla B #3R, True North
Vertical (TVD) Reference: GL 6610' & RKB 14' @ 6624.00ft
Section (VS) Reference: Slot - (0.00N, 0.00E)
Measured Depth Reference: GL 6610' & RKB 14' @ 6624.00ft
Calculation Method: Minimum Curvature

PROJECT DETAILS: Rio Arriba County, NM (NAD83)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Central Zone

System Datum: Mean Sea Level

Plan: OH

12:18, July 11 2013
Created By: Janie Collins

Survey Report



Company:	EnerVest Operating LLC	Local Co-ordinate Reference:	Well Jicarilla B #3R
Project:	Rio Arriba County, NM (NAD83)	TVD Reference:	GL 6610' & RKB 14' @ 6624.00ft
Site:	Jicarilla	MD Reference:	GL 6610' & RKB 14' @ 6624.00ft
Well:	Jicarilla B #3R	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Grand Junction District

Project	Rio Arriba County, NM (NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Central Zone		

Site	Jicarilla
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Site Position:		Northing:	-274,017,644.35 usft	Latitude:	7° 5' 24.101 S
From:	Lat/Long	Easting:	372,015,898.75 usft	Longitude:	42° 3' 21.841 E
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.00 °

Well	Jicarilla B #3R					
Well Position	+N/-S	0.00 ft	Northing:	3,090,091.86 usft	Latitude:	39° 29' 6.288 N
	+E/-W	0.00 ft	Easting:	1,331,286.10 usft	Longitude:	107° 20' 43.116 W
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft	Ground Level:	6,610.00 ft	

Wellbore	OH
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	1/9/2013	9.85	65.81	52,164

Design	OH
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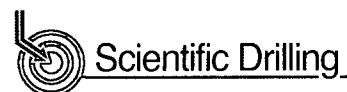
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	91.73

Survey Program		Date	7/11/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
615.00	7,710.00	Survey #1 - MWD Survey (OH)	MWD SDI	MWD - Standard ver 1.0.1	

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
615.00	2.26	73.39	614.84	3.47	11.62	11.51	0.37	0.37	0.00
First SDI MWD Survey									
706.00	4.66	84.30	705.67	4.35	17.02	16.88	2.72	2.64	11.99
797.00	6.27	79.77	796.25	5.60	25.59	25.41	1.83	1.77	-4.98
889.00	7.84	85.75	887.55	6.95	36.79	36.56	1.88	1.71	6.50
983.00	9.84	86.52	980.43	7.92	51.20	50.94	2.13	2.13	0.82
1,078.00	11.07	90.02	1,073.86	8.41	68.43	68.14	1.46	1.29	3.68
1,173.00	12.10	90.23	1,166.92	8.36	87.51	87.21	1.09	1.08	0.22
1,268.00	12.62	88.70	1,259.72	8.56	107.84	107.53	0.65	0.55	-1.61
1,362.00	13.53	88.63	1,351.28	9.05	129.10	128.76	0.97	0.97	-0.07

Survey Report



Company:	EnerVest Operating LLC	Local Co-ordinate Reference:	Well Jicarilla B #3R
Project:	Rio Arriba County, NM (NAD83)	TVD Reference:	GL 6610' & RKB 14' @ 6624.00ft
Site:	Jicarilla	MD Reference:	GL 6610' & RKB 14' @ 6624.00ft
Well:	Jicarilla B #3R	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Grand Junction District

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,486.00	13.37	93.92	1,471.88	8.42	157.90	157.58	1.00	-0.13	4.27
1,579.00	14.21	94.96	1,562.20	6.70	180.00	179.72	0.94	0.90	1.12
1,673.00	12.12	95.96	1,653.73	4.68	201.31	201.08	2.24	-2.22	1.06
1,768.00	13.21	94.51	1,746.41	2.79	222.05	221.87	1.20	1.15	-1.53
1,863.00	11.19	94.12	1,839.26	1.27	242.07	241.92	2.13	-2.13	-0.41
1,958.00	10.15	93.42	1,932.62	0.11	259.62	259.50	1.10	-1.09	-0.74
2,050.00	9.38	91.82	2,023.29	-0.61	275.21	275.10	0.89	-0.84	-1.74
2,145.00	7.29	89.16	2,117.28	-0.77	288.97	288.87	2.24	-2.20	-2.80
2,240.00	5.11	91.08	2,211.72	-0.76	299.23	299.12	2.30	-2.29	2.02
2,335.00	2.52	93.13	2,306.50	-0.95	305.55	305.44	2.73	-2.73	2.16
2,426.00	1.13	104.77	2,397.45	-1.29	308.41	308.31	1.57	-1.53	12.79
2,520.00	1.08	121.86	2,491.43	-2.00	310.06	309.98	0.35	-0.05	18.18
2,615.00	0.89	181.79	2,586.42	-3.21	310.80	310.75	1.05	-0.20	63.08
2,710.00	0.96	211.65	2,681.41	-4.62	310.36	310.36	0.51	0.07	31.43
2,804.00	1.22	208.28	2,775.39	-6.17	309.47	309.52	0.28	0.28	-3.59
2,896.00	0.45	317.49	2,867.38	-6.77	308.76	308.83	1.56	-0.84	118.71
2,991.00	0.91	334.34	2,962.38	-5.81	308.18	308.22	0.52	0.48	17.74
3,086.00	0.97	325.00	3,057.36	-4.48	307.40	307.39	0.17	0.06	-9.83
3,181.00	1.04	329.86	3,152.35	-3.07	306.50	306.46	0.12	0.07	5.12
3,275.00	1.36	331.61	3,246.33	-1.35	305.54	305.45	0.34	0.34	1.86
3,369.00	0.96	347.31	3,340.31	0.40	304.84	304.69	0.54	-0.43	16.70
3,463.00	0.63	14.54	3,434.30	1.67	304.80	304.61	0.52	-0.35	28.97
3,559.00	0.17	350.73	3,530.30	2.32	304.91	304.70	0.50	-0.48	-24.80
3,652.00	0.11	357.20	3,623.30	2.54	304.88	304.66	0.07	-0.06	6.96
3,809.00	0.35	221.37	3,780.30	2.33	304.56	304.35	0.28	0.15	-86.52
3,966.00	0.47	207.07	3,937.29	1.40	303.95	303.76	0.10	0.08	-9.11
4,093.00	0.40	204.82	4,064.29	0.53	303.52	303.37	0.06	-0.06	-1.77
4,407.00	0.37	180.52	4,378.28	-1.47	303.05	302.96	0.05	-0.01	-7.74
4,720.00	0.46	178.99	4,691.27	-3.74	303.07	303.04	0.03	0.03	-0.49
5,035.00	0.48	210.67	5,006.26	-6.14	302.42	302.46	0.08	0.01	10.06
5,345.00	0.56	161.73	5,316.25	-8.70	302.23	302.35	0.14	0.03	-15.79
5,660.00	1.58	281.29	5,631.22	-9.31	298.45	298.60	0.61	0.32	37.96
5,752.00	1.28	273.18	5,723.19	-9.00	296.18	296.32	0.39	-0.33	-8.82
5,845.00	1.36	252.09	5,816.16	-9.28	294.09	294.24	0.53	0.09	-22.68
5,941.00	1.04	296.86	5,912.14	-9.24	292.23	292.38	1.00	-0.33	46.64
6,036.00	1.39	6.54	6,007.13	-7.71	291.60	291.70	1.49	0.37	73.35
6,131.00	0.86	8.57	6,102.11	-5.86	291.83	291.88	0.56	-0.56	2.14
6,286.00	0.00	9.45	6,257.10	-4.71	292.01	292.02	0.55	-0.55	0.00
6,378.00	0.84	26.14	6,349.10	-4.10	292.30	292.29	0.91	0.91	0.00
6,536.00	0.07	19.06	6,507.09	-2.97	292.85	292.80	0.49	-0.49	-4.48
6,693.00	0.63	193.03	6,664.09	-3.72	292.68	292.66	0.45	0.36	110.81
6,850.00	0.90	191.60	6,821.08	-5.77	292.24	292.28	0.17	0.17	-0.91
7,007.00	0.98	206.65	6,978.05	-8.18	291.39	291.50	0.16	0.05	9.59

Survey Report



Company:	EnerVest Operating LLC	Local Co-ordinate Reference:	Well Jicarilla B #3R
Project:	Rio Arriba County, NM (NAD83)	TVD Reference:	GL 6610' & RKB 14' @ 6624.00ft
Site:	Jicarilla	MD Reference:	GL 6610' & RKB 14' @ 6624.00ft
Well:	Jicarilla B #3R	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Grand Junction District

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,102.00	1.08	225.38	7,073.04	-9.53	290.39	290.54	0.37	0.11	19.72
7,195.00	0.17	149.80	7,166.03	-10.27	289.83	290.01	1.13	-0.98	-81.27
7,288.00	0.10	111.28	7,259.03	-10.42	289.98	290.16	0.12	-0.08	-41.42
7,444.00	0.30	244.56	7,415.03	-10.64	289.74	289.93	0.24	0.13	85.44
7,653.00	1.22	309.96	7,624.01	-9.45	287.54	287.69	0.54	0.44	31.29
Last SDI MWD Survey									
7,710.00	1.22	309.96	7,681.00	-8.67	286.61	286.74	0.00	0.00	0.00
Projection to TD									

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
615.00	614.84	3.47	11.62	First SDI MWD Survey
7,653.00	7,624.01	-9.45	287.54	Last SDI MWD Survey
7,710.00	7,681.00	-8.67	286.61	Projection to TD

Checked By: _____ Approved By: _____ Date: _____