

AS-DRILLED

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

Form C-102
Revised August 1, 2013
Submit one copy to appropriate
District Office

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-31166	² Pool Code 72319/71599	³ Pool Name BLANCO MESAVERDE/BASIN DAKOTA
⁴ Property Code 306750	⁵ Property Name JICARILLA A	⁶ Well Number 2F
⁷ OGRID No. 143199	⁸ Operator Name ENERVEST OPERATING, LLC.	⁹ Elevation 6689'

¹⁰Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	18	26-N	5-W		1850	NORTH	1045	EAST	RIO ARriba

¹¹Bottom Hole Location If Different From Surface

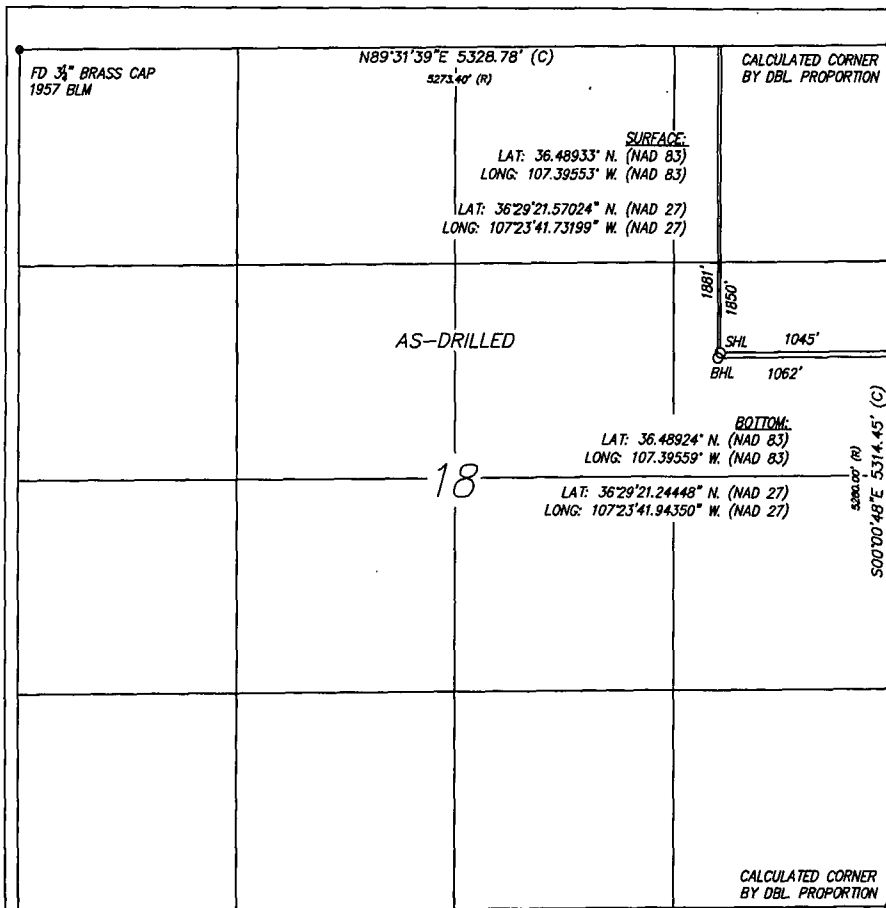
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	18	26-N	5-W		1881	NORTH	1062	EAST	RIO ARriba

¹² Dedicated Acres MV - E/320 DK - E/320	¹³ Joint of Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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RCVD AUG 17 13
OIL CONS. DIV.

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.

DIST. 3



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: 8/22/13

Printed Name: BART TREVIÑO

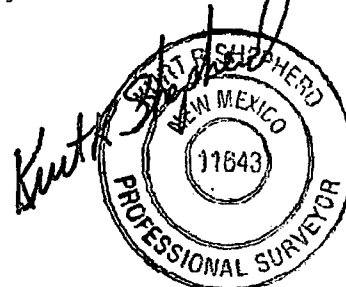
E-mail Address: BART.TREVIÑO@ENERVEST.NET

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 19, 2013

Signature and Seal of Professional Surveyor



Certificate Number 11643

AV

D & J DRILLING, LLC
P. O. BOX 49
FARMINGTON, NM 87499



ORIGINAL

DATE: 05/15/13

TO: ENERVEST OPERATING L.L.C.
1001 FANNIN STREET, SUITE 800
HOUSTON, TX 77002-6707

ATTN: MR. RICHARD TRUHEART

THIS LETTER IS TO CERTIFY THAT D & J DRILLING, DID RUN DEVIATION SURVEYS AT
THE LISTED DEPTH ON YOUR JICARILLA A #2F, IN SEC18-T26N-R05W, IN RIO ARRIBA COUNTY,
NEW MEXICO. API WELL NUMBER - 30-039-31166

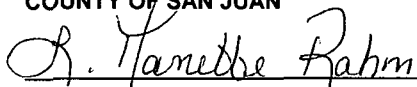
DEPTH	DEGREE DEVIATION
236 '	2
478 '	3/4

OIL CONS. DIV DIST. 3

JUL 05 2013

TO THE BEST OF MY KNOWLEDGE, I SWEAR THIS INFORMATION TO BE TRUE.

STATE OF NEW MEXICO
COUNTY OF SAN JUAN



NOTARY PUBLIC, L. NANETTE RAHM

SINCERELY,



OWNER- CLARENCE D. KEENOM





Scientific Drilling

Directional Survey Certification

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

OIL CONS. DIV DIST. 3
JUL 05 2013

RE: <u>Enervest</u>	Operator
<u>Jicarilla A #2F</u>	Well Name & No.
<u>Rio Arriba County, NM</u>	County & State
<u>330513DEF9258</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 636 feet to a measured depth of 7772 feet is true and correct as determined from all available records.

[Signature]

Signature

Colorado District Well Planner

Title

Scientific Drilling International

Company

State of : Colorado }

} ss

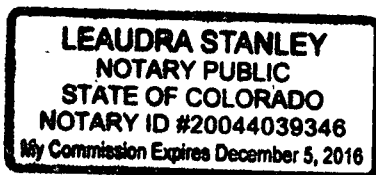
County of : Mesa }

On this 31st day of May, 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

[Signature]
Notary Public

12/5/14
My Commission Expires



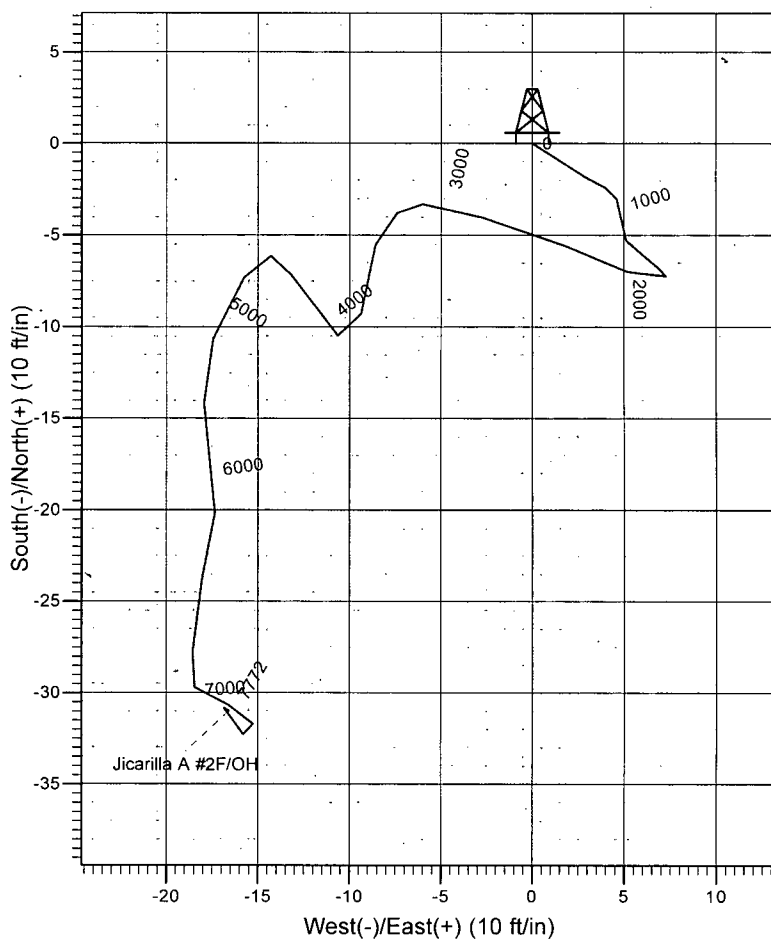
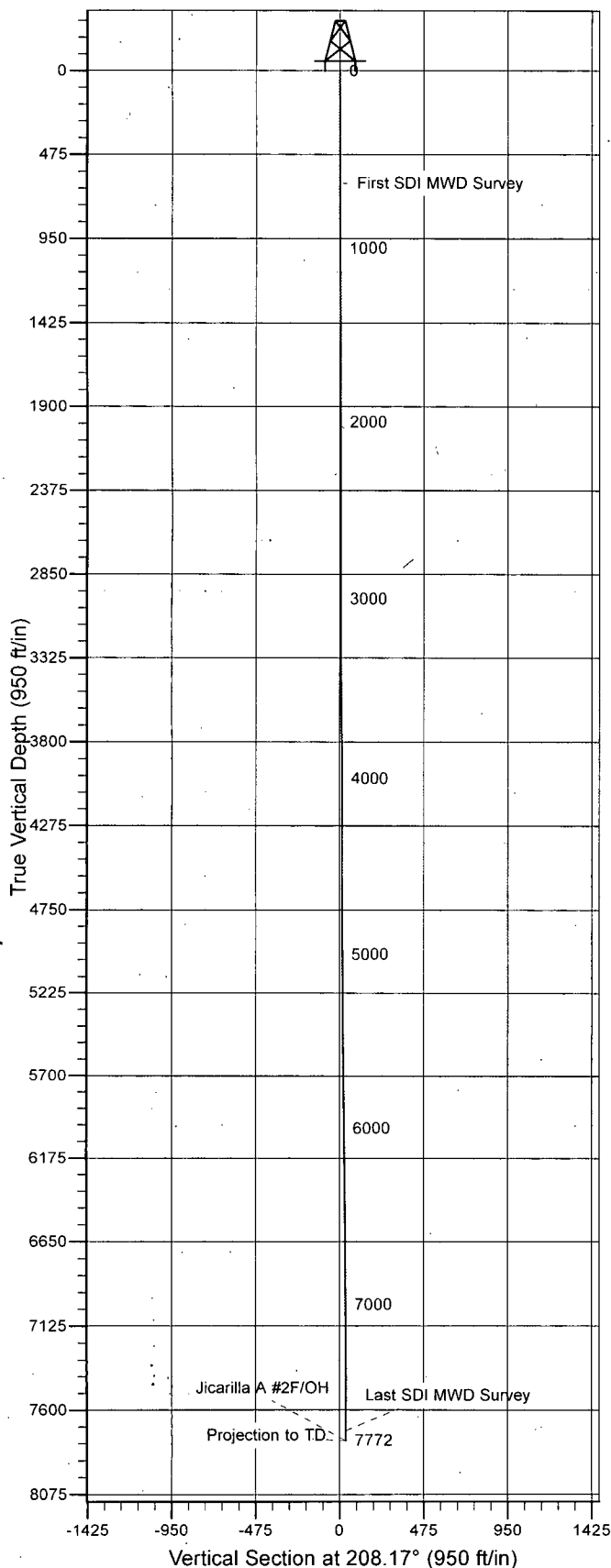


Scientific Drilling

Company: EnerVest Operating LLC
Project: Rio Arriba County, NM (NAD83)
Site: Jicarilla
Well: Jicarilla A #2F
Wellbore: OH
Design: OH

OIL CONS. DIV DIST. 3

JUL 05 2013



Well Details: Jicarilla A #2F

TVD Reference: WELL @ 0.00ft (Original Well Elev) Level: 0.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 -274017644.34 372015898.75 82° 23' 12.207 S 36° 38' 16.552 E

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Jicarilla A #2F, True North
Vertical (TVD) Reference: WELL @ 0.00ft (Original Well Elev)
Section (VS) Reference: Slot - (0.00N, 0.00E)
Measured Depth Reference: WELL @ 0.00ft (Original Well Elev)
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

15:09, May 31 2013
Created By: Janie Collins

EnerVest Operating LLC

Rio Arriba County, NM (NAD83)

Jicarilla

Jicarilla A #2F

OH

Design: OH

Standard Survey Report

31 May, 2013



Survey Report



Company:	EnerVest Operating LLC	Local Co-ordinate Reference:	Well Jicarilla A #2F
Project:	Rio Arriba County, NM (NAD83)	TVD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	Jicarilla	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Well:	Jicarilla A #2F	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 A #2F				
Well Position	+N/-S	0.00 ft	Northing:	-274,017,644.35 usft	Latitude:	82° 23' 12.207 S
	+E/-W	0.00 ft	Easting:	372,015,898.75 usft	Longitude:	36° 38' 16.552 E
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft	Ground Level:	0.00 ft	

Wellbore	OH
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/31/2013	-49.78	-67.08	48,451

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	208.17

Survey Program		Date	5/31/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
636.00	7,772.00	Survey #1 - MWD Survey (OH)	MWD SDI	MWD - Standard ver 1.0.1	

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)
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	636.00	0.61	122.27	635.99	-1.81	2.86	0.24	0.10	0.10	0.00
First SDI MWD Survey	789.00	0.36	110.43	788.98	-2.41	4.00	0.24	0.18	-0.16	-7.74
	945.00	0.34	161.54	944.98	-3.02	4.61	0.49	0.19	-0.01	32.76
	1,259.00	0.51	170.84	1,258.97	-5.28	5.12	2.24	0.06	0.05	2.96
	1,576.00	0.55	94.16	1,575.96	-6.79	6.87	2.74	0.21	0.01	-24.19
	1,887.00	0.41	251.78	1,886.96	-7.24	7.30	2.94	0.30	-0.05	50.68
	2,202.00	0.43	300.44	2,201.95	-7.00	5.21	3.71	0.11	0.01	15.45
	2,516.00	0.88	288.99	2,515.93	-5.62	1.91	4.05	0.15	0.14	-3.65
	2,827.00	0.94	288.40	2,826.89	-4.03	-2.77	4.86	0.02	0.02	-0.19

Survey Report



Company:	EnerVest Operating LLC	Local Co-ordinate Reference:	Well Jicarilla A #2F
Project:	Rio Arriba County, NM (NAD83)	TVD Reference:	WELL @ 0.00ft (Original Well Elev)
Site:	Jicarilla	MD Reference:	WELL @ 0.00ft (Original Well Elev)
Well:	Jicarilla A #2F	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)
3,140.00	0.30	263.83	3,139.87	-3.31	-6.02	5.76	0.22	-0.20	-7.85
3,361.00	0.48	242.42	3,360.86	-3.80	-7.41	6.85	0.10	0.08	-9.69
3,735.00	1.47	186.87	3,734.81	-9.29	-9.37	12.61	0.34	0.26	-14.85
3,928.00	0.96	322.79	3,927.79	-10.46	-10.65	14.25	1.17	-0.26	70.42
4,245.00	0.54	321.36	4,244.76	-7.18	-13.19	12.55	0.13	-0.13	-0.45
4,558.00	0.08	238.97	4,557.76	-6.14	-14.30	12.16	0.17	-0.15	-26.32
4,874.00	0.60	230.39	4,873.75	-7.31	-15.76	13.88	0.16	0.16	-2.72
5,216.00	0.74	187.99	5,215.73	-10.64	-17.45	17.61	0.15	0.04	-12.40
5,592.00	0.34	188.22	5,591.71	-14.14	-17.94	20.94	0.11	-0.11	0.06
5,902.00	0.61	167.07	5,901.70	-16.66	-17.71	23.05	0.10	0.09	-6.82
6,216.00	0.68	180.61	6,215.68	-20.16	-17.35	25.96	0.05	0.02	4.31
6,529.00	0.68	201.48	6,528.66	-23.74	-18.05	29.45	0.08	0.00	6.67
6,841.00	0.85	176.25	6,840.63	-27.77	-18.58	33.25	0.12	0.05	-8.09
6,998.00	0.56	177.17	6,997.62	-29.70	-18.46	34.90	0.18	-0.18	0.59
7,154.00	1.35	96.67	7,153.60	-30.68	-16.60	34.88	0.88	0.51	-51.60
7,248.00	1.14	166.15	7,247.59	-31.71	-15.28	35.17	1.52	-0.22	73.91
7,403.00	0.96	315.97	7,402.58	-32.28	-15.81	35.92	1.31	-0.12	96.66
7,715.00	0.32	119.58	7,714.56	-30.83	-16.87	35.14	0.41	-0.21	52.44
Last SDI MWD Survey									
7,772.00	0.32	119.58	7,771.56	-30.98	-16.59	35.15	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)	
636.00	635.99	-1.81	2.86	First SDI MWD Survey
7,715.00	7,714.56	-30.83	-16.87	Last SDI MWD Survey
7,772.00	7,771.56	-30.98	-16.59	Projection to TD

Checked By: _____ Approved By: _____ Date: _____