Form 3160-5

## UNITED STATES

FORM APPROVED

	PARTMENT OF THE LEAU OF LAND MAN			5. Lease Serial No.	xpires July 31, 2010
Do not use this t		ORTS ON WELLS to drill or to re-enter ar PD) for such proposal		LC-031621-b 6. If Indian, Allottee o	r Tribe Name
SUBMI	T IN TRIPLICATE – Other	7. If Unit of CA/Agreement, Name and/or No.			
1. Type of Well  Oil Well  Gas V	Vell Other			8. Well Name and No. SEE ATTACH	IED LIST
2. Name of Operator EnerVest Op	erating, LLC		V	9. API Well No. SEE ATTACHE	ED LIST
3a. Address 1001 Fannin Street Ste 800 Houston, Texas 77002		3b. Phone No. (include area co 713-495-1514	de)	10. Field and Pool or E SEE ATTACH	
4. Location of Well (Footage, Sec., T.,	R., M., or Survey Description,	11 Country or Parish,			
SEE ATTACHED LIST		Lea, New M	lexico		
12. CHEC	CK THE APPROPRIATE BO	X(ES) TO INDICATE NATUR	E OF NOTIO	CE, REPORT OR OTHI	ER DATA
TYPE OF SUBMISSION		TY	PE OF ACT	ION	
▼ Notice of Intent	Acidize Alter Casing	Deepen Fracture Treat	=	uction (Start/Resume)	Water Shut-Off Well Integrity
Subsequent Report	Casing Repair Change Plans	New Construction Plug and Abandon	=	mplete porarily Abandon	OtherWell furnishing water
Final Abandonment Notice	Convert to Injection	Plug Back	☐ Wate	r Disposal	for disposal
13. Describe Proposed or Completed O	peration: Clearly state all per	tinent details, including estimate	d starting da	te of any proposed worl	k and approximate duration thereof. I

the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

The attached list of wells are furnishing water for off lease disposal on BLM Lease LC-031621-b.

NM State Corporation Commission Permit # 2547982.

Included is information for the water disposal site and a water analysis report dated 12/8/2009.

RECEIVED

SUBJECT TO LIKE APPROVAL BY STATE

MAR 03 2010 HOBBSOCD ACCEPTED FOR RECORD

FEB 2 6 2010 /s/ JD Whitlock J

**BUREAU OF LAND MANAGEMENT CARLSBAD FIELD OFFICE** 

		,
14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)		
Shirley Galik	Title Sr. Regulatory Tech	
Signature SMILLE Hall	Date 01/25/2010	
THIS SPACE FOR FEI	DERAL OR STATE OFFICE USE	121 PLANTE INTERNATIONAL PROPERTY INTERNATION
Approved by	Date 01/25/2010  DERAL OR STATE OFFICE USE  Title OC DESCRIPTION OF THE DESCRIPTION OF TH	MAR 0 8 2010
Conditions of approval, if any, are attached. Approval of this notice does not warrant that the applicant holds legal or equitable title to those rights in the subject lease which entitle the applicant to conduct operations thereon.	or certify	
Tetle 18 IV.C. Centrem 1001 and Tetle 42 IV.C. Centrem 1212 make at a course for our	116.11 1 1 1 1 1 1	54 II + 151 ·

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

#### LC-031621-b

# ENERVEST OPERATING, LLC BLM Well List for Eumont-Jal et al Area Water Hauling

	Well	BLM		Le	gal De	sc.					API	Water Storage	Bbls
Lease Name	No	Lease #	UL	Sec	Twns	Rge	County	Field	Formation	Footage	Number	FG Tank (bbls)	Wtr/Day
			T										
	1						1						
Britt B 8	$2J_{i}$	LC 031621 (b)	C	8	20 S	37 E	Lea	Monument	San Andres	330' FNL & 2310' FWL /	30-025-06007	<b>√</b> 300	343
Laughlin Com*	1 '	LC 031621 (b) NM 84618	С	8	20 S	37 E	), Lea	Eumont	Yates-7Riv-Queen	660' FNL & 1980' FWL	30-025-06006	Sr 150	171
Laughlin Com*		LC 031621 (b) NM 84618	·N	5	20 S	37 E	$I_{\text{,Lea}}$	Eumont	Yates-7Riv-Queen	330' FSL & 1650' FWL	30-025-05924	150	1
Britt-Laughlin Com*	4	LC 031621 (b) NM 84618	A	8	20 S	37 E	Lea	Eumont	Yates-7Riv-Queen	660' FNL & 660' FEL	30-025-06005	✓ TA'd*	0
Britt-Laughlin Com*		LC 031621 (b) NM 84618	0	5	20 S	37 E	7 <sub>/Lea</sub>	Eumont	Yates-7Riv-Queen	330' FSL & 2310' FEL //	30-025-05907	√ TA'd*	0
Britt-Laughlin Com*	<sub>6</sub> ✓	LC 031621 (b) NM 84618	I	5	20 S	37 E	JLea	Eumont	Yates-7Riv-Queen	1860' FSL & 760' FEL	30-025-31105	150	0.25

\*MIT - passed 2009

#### Transport via Pipeline to either:

#### **DISPOSAL SITE:**

Rice Engineering Corp. E.M.E. SWD System UL M, Sec 9, T 20 S, R 37 E

OR

Rice Engineering Corp. E.M.E. SWD System UL G, Sec 8, T 20 S, R 37 E

Disposal Order # R-1483

Disposal Order # R-6855

If the pipeline is not available to transport the water, the following trucking companies will be used as an alternative.

Victory Energy Svc LLC DISPOSAL SITE: Ruthco Oil LLC Hobbs East San Andres SWD #104 UL F, Sec 30, T18S, R39E 1980' FNL & 2310' FWL API 30-025-07950 Order R-3500 Fulco Trucking
DISPOSAL SITE:
Fulfer Oil & Cattle LLC
Brown #5 SWD, Order R-5196
UL E, Sec 25, T 25 S, R 36 E
1650' FNL & 990' FWL
API 30-025-09807
Order R-5196

Lobo Trucking
DISPOSAL SITE:
J. Cooper Enterprises Inc.
Anderson #1 SWD, Order R-12375
UL O, Sec 8, T 20 S, R 37 E
330' FSL & 1980' FEL
API 30-025-29962
Order R-12375

#### Weatherford Engineered Chemistry

2263 West Bell St Odessa, TX 79766

Phone (432) 368-8410 Fax (432) 335-0618

#### WATER ANALYSIS REPORT

Company:

EnerVest Operating

Sample Point

Water Source: Britt B-8 #2 Lab ID Number:

Date Sampled:

12-07-09 Date Analyzed: 12-08-09

Production Data:

BOPD:

BWPD:

MMCFD:

ρH. 6.40 Dissolved HaS ND Dissolved CO2. 480.0

Total lonic Strength: Specific Gravity Density, (lbs/gal)

1.212 1.048

61,928

Resistivity @ 75°F (Chm-Meters):

0.12000

Total Dissolved Solids (mg/L):

8.74

Cations mg/L Calcium: 5,800 Magnesium: Ð Sodium: 17,781 Barium: 135 Strontium: 0 Ferrous Iron: 0.0Total Dissolved Iron: 0.0

Anions mg/LMeq/L Carbonate: 800 13 Bicarbonate: 992 16 Chloride: 37,000 1,042 Sulfate: 220 5 Total Hardness 8,300

## PROBABLE MINERAL COMPOSITION

Meq/L

290

773

0

	mg/L	Meq/L
Calcium Bicarbonate:	1.318	16
Calcium Sulfate:	312	5
Calcium Chloride:	14.938	269
Magnesium Bicarbonate:	Çı	ſI
Magnesium Sulfate:	Û	0
Magnesium Chloride:	Û	ũ
Sodium Bicarbonate:	Ľ.	ñ
Sodium Sulfate:	Ci	n O
Sodium Chloride:	45,195	773

#### Remarks

ND - not determined San Andres Formation

Hydro Pax

Analyst:

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## Weatherford Engineered Chemistry

2263 West Bell St. Odessa, TX 79766

Phone (432) 368-8410 Fax (432) 335-0618

## SCALE DEPOSITION POTENTIAL ANALYSIS

Company: Water Source: Sample Point:	EnerVest Oper Britt B-8 #2	ating			Lab ID N Date Sa Date An	mpled:	12-07-09 12-08-09
Brine Compositi	on						
pH:	6.40	Ca, mg/L:	5,800		Total Hardne	ss, mg/L	8,300
Specific Gravity	1.048	Mg, mg/L:	0	Total	l Dissolved Soli	_	61,928
HCO₃, mg/L.	992	Na, mg/L	17,781		Total Ionic	Strengh	1.212
CI, mg/L:	37,000	Ba, mg/∟	135			-	
SO <sub>4</sub> , mg/L.	220	Sr, mg/L	Ũ	To	otal Dissoved Ir	on, mg/L:	0.0
Calcium Carbona	te Scale Indice	s				Specified Te	mperatures
Temperature, °F:		75	100	125	150	40	) 180
Stiff-Davis Index		0.29	0.58	0.95	1.44	0.01	2.03
Deposition, lbs/1,0	00 Bbls:	272.5	405 2	502.3	545.9	18.5	5 563,1
Calcium Sulfate S	cale Indices					Specified Te	naraturae
Temperature, °F:		75	100	125	150		•
Supersaturation Ra	ațin.	0 161	0 161	0.164	0 168	40	180
Deposition, lbs/1,00		-570 8	-568.7	-556 9	-541.5	0.162 -565 5	
Barium Sulfate So	ale Indices				!	Specified Ter	nperatures
Temperature, °F:		75	100	12	:5 150	40	180
Supersaturation Ra	itio	117 991	101.565	69.75	i8 47 347		32,281
Deposition, lbs/1,00	Jù Ebls:	79.6	79.5	79.	.1 78.6		77.8

## Weatherford Engineered Chemistry

2263 West Bell St Odessa, TX 79766

Phone (432) 368-8410 Fax (432) 335-0618

### SCALE DEPOSITION POTENTIAL TRENDS

Company: Water Source: EnerVest Operating

Britt B-8 #2

Sample Point:

Lab ID Number:

Date Sampled:

Date Analyzed:

12-07-09 12-08-09

Calcium Carbonate

179
1343
0.895
0.448
75
100
125
150

Temperature °F









