BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

APPLICATION OF ENERVEST OPERATING LLC FOR EXPANSION OF THE WATERFLOOD PROJECT FOR WEST LOCO HILLS GRAYBURG NO. 4 SAND UNIT, EDDY COUNTY, NEW MEXICO. **Case No.** 14243

APPLICATION

Enervest Operating LLC applies for an order approving the expansion of the waterflood project in the West Loco Hills Grayburg No. 4 Sand Unit (the "Unit Area"). In support thereof, applicant states:

1. Applicant is the operator of the Unit Area, which covers the lands located in Eddy County, New Mexico described in Exhibit A attached hereto. The unitized interval is the Grayburg formation, as further described in the unitization application filed concurrently with this application.

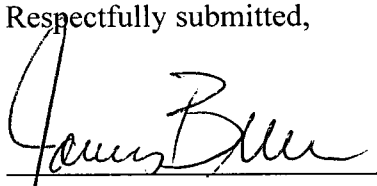
2. A waterflood project was previously approved for the Unit Area, as described in Commission Order Nos. R-2178 and R-3204, attached hereto as Exhibits B and C. Applicant proposes to expand the waterflood project in the Unit Area,

3. Beach proposes to inject water into Garyburg formation from existing or planned wells, as described in the Form C-108 for the expanded project attached hereto as Exhibit D.

4. Approval of this application will prevent waste and protect correlative rights.

WHEREFORE, applicant requests that, after notice and hearing, the Division enter its order approving the injection application.

Respectfully submitted,

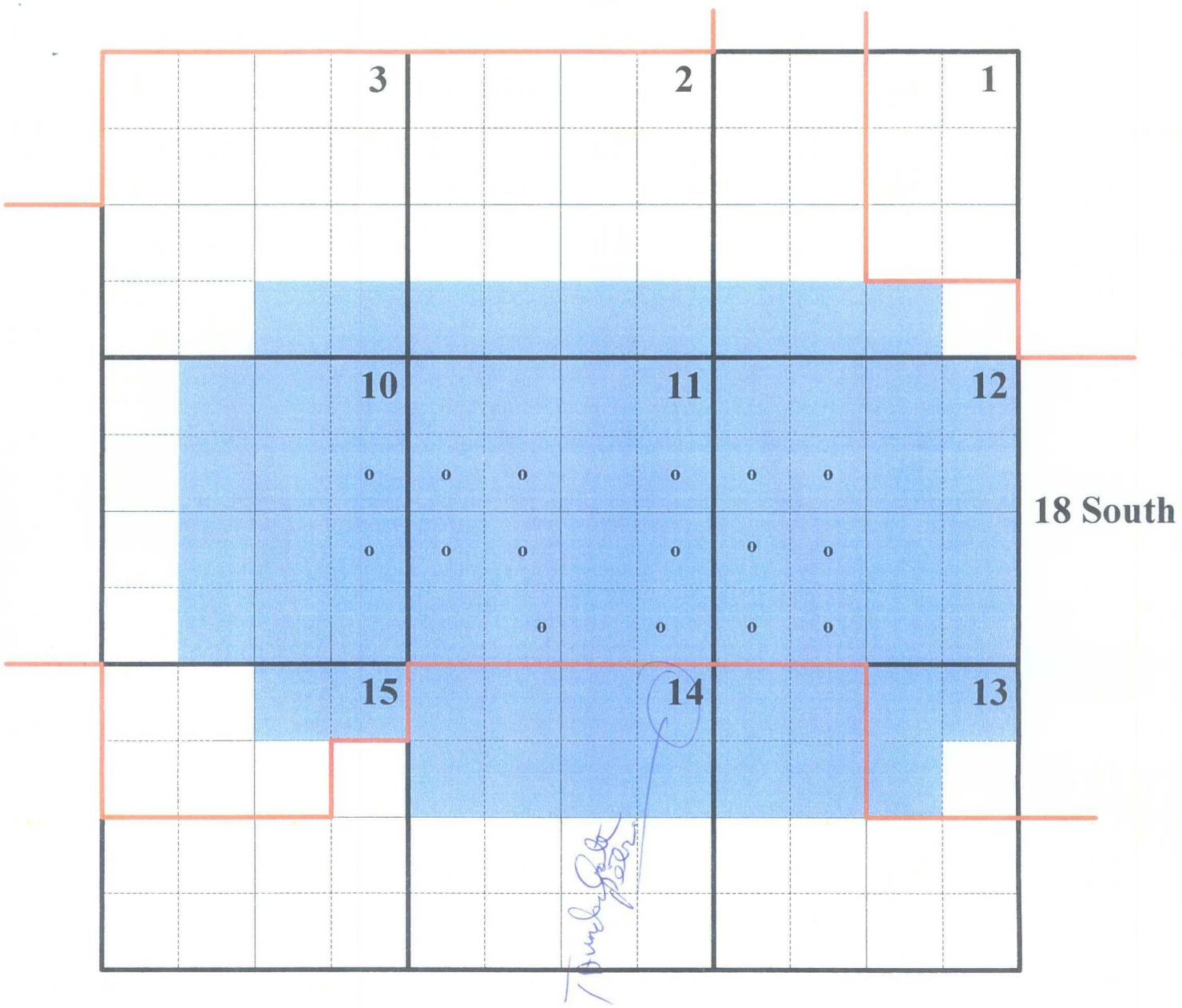


James Bruce
Post Office Box 1056
Santa Fe, New Mexico 87504
(505) 982-2043

Attorney for Enervest Operating LLC

PROPOSED ADVERTISEMENT

Case No. 14248: Application of Enervest Operating LLC for expansion of the waterflood project for the West Loco Hills Grayburg No. 4 Sand Unit, Eddy County, New Mexico. Applicant seeks approval to expand the waterflood project in the West Loco Hills Grayburg No. 4 Sand Unit by the injection of water into the Grayburg formation into wells located on 5307.73 acres of federal, state, and fee lands covering parts of Township 17 South, Range 29 East, Township 18 South, Range 29 East, and Township 18 South, Range 30 East, N.M.P.M., described in Commission Order No. R-2166. The unit area is centered approximately 6 miles southwest of Loco Hills, New Mexico.



NOTICE AREA INSIDE THE UNIT

Section 1: S/2 SW/4, SW/4 SE/4
Section 2: S/2 S/2
Section 3: S/2 SE4
Section 10: E/2, E/2 W/2
Section 11: All
Section 12: All
Section 13: N/2 NE/4, SW/4 NE/4
Section 15: N/2 NE/4

NOTICE AREA OUTSIDE THE UNIT

Section 14: N/2
Section 13: NW/4

C-108 Notice Area

WLHU Boundary

o **Injection Wells**

EXHIBIT A

Non Everest List

Existing Wells/Operators Within the WLHU C-108 Notice Area
All in Township 18 South, Range 29 East, NMPM

Section	Operator	Well Name	API No.	Well Location	Completion	Dedicated Acreage
1	EOG Resources, Inc.	Sand Tank 1 Fed. Com No. 1	30-015-29221	155' FNL & 687' FEL (H)	Strawn-Active Morrow-Inactive	SE/4 NE/4 E/2
1	Yates Petroleum Corp.	Cerritos APT Fed Com No. 1	30-015-29690	1980' FNL & 1980' FWL (F)	Morrow-Active	W/2
2	Mewbourne Oil Company	Pavo 2 State Com No. 2	30-015-30233	1650' FNL & 1650' FWL (F)	Morrow-Active	W/2
2	Mewbourne Oil Company	Pavo 2 State Com No. 1	30-015-35190	940' FSL & 1980' FWL (N)	Morrow-Active	W/2
10	Yates Petroleum Corp.	Loco ASI Fed Com No. 1	30-015-30094	1650' FSL & 1200' FWL (L)	Chester-Morrow-Active	W/2
10	Yates Petroleum Corp.	Cabeza AUD Fed Com No. 1	30-015-31039	660' FNL & 660' FWL (D)	Atoka-Cheser-Morrow	W/2
10	Oxy USA WTP Ltd. Part.	Oxy Roadside Fed No. 1	30-015-31277	660' FNL & 660' FEL (A)	Morrow-Active	E/2
11	Mewbourne Oil Company	Pavo 11 State Com No. 1	30-015-34439	1650' FSL & 660' FEL (I)	Chester-Morrow-Active	E/2
11	Mewbourne Oil Company	Pavo 11 State Com No. 2	30-015-35191	1650' FNL & 660' FEL (H)	Morrow-Active	E/2
11	EOG Resources, Inc.	Lobo State Com No. 1H	30-015-35709	1650' FNL & 330' FEL (H)	Bone Spring-Active	SE/4 NE/4, E/2 SE/4
12	Yates Petroleum Corp.	Sand Tank APS Fed Com No. 1	30-015-28692	990' FSL & 2145' FWL (N)	Strawn-Morrow-Active	S/2
12	EOG Resources, Inc.	Duggan 12 Fed No. 1	30-015-28995	2162' FNL & 784' FEL (H)	Bone Spring-Active	S/2 N/2
12	EOG Resources, Inc.	Duggan 12 Fed Com No. 2	30-015-29947	1980' FNL & 1650' FWL (F)	Morrow-Active	N/2
15	Yates Petroleum Corp.	Cerros AQF Fed No. 1	30-015-29276	1650' FSL & 990' FEL (I)	Morrow-Active	E/2
14	Thunderbolt Petroleum	State No. 10	30-015-10522	330' FNL & 2100' FEL (B)	Grayburg-Active	NW/4 NE/4

EXHIBIT B

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

FORM C-108
Revised June 10, 2003

Case 14243

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____Secondary Recovery ___X_____Pressure Maintenance _____Disposal _____Storage
Application qualifies for administrative approval? ___ _____Yes ___X_____No

II. OPERATOR: ____Enervest LTD._____

ADDRESS: _____1001 Fannin Street, Suite 800 Houston, Texas 77002-5300_____

CONTACT PARTY: ____Mr. Robert Lee_____PHONE: __432-682-1251_____

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? ____X_____Yes _____ _____No
If yes, give the Division order number authorizing the project: _____Order # R-2178 B_____

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: _____Robert Lee _____TITLE: __Consulting Engineer_____

SIGNATURE: _____DATE: ____October 10, 2008_____

E-MAIL ADDRESS: _____robertlee5@att.net_____

* If the information required under Sections VI, VIII, X, and XI above has been previ
Please show the date and circumstances of the earlier submittal: _____

EXHIBIT D

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Dist

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name.

(2) The injection interval and whether it is perforated or open-hole.

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

(1) The name, address, phone number, and contact party for the applicant;

(2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;

(3) The formation name and depth with expected maximum injection rates and pressures; and,

(4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

WEST LOCO HILLS UNIT
APPLICATION FOR INJECTION
NMOCD Form C-108 Section III

III. Data on injection well(s)

A. Injection well information (see attached schematic)

Tabular data

1. A list of the wells to be drilled with their locations is attached.

2. Typical Casing Program: 8 5/8" surface csg. @ 450', cemented w/275 sx. circulated to surface,

4 ½" J-55, 9.5# /ft. casing to 2800' cemented w/ 360 sx. cement. circulated to surface

A drilling prognosis for a typical proposed injection well is attached.

3. Injection tubing: + or - 77 jts 2 7/8", 4.6 lb/ft, J-55 Rice Duoline internally cement lined tubing set@ 2475' (or within 100' of the top perf depending on formation top).

4. Packer: Plastic coated Lok-Set Packer set at 2475'.

B. Other well information

1. Injection formation: Grayburg
Field: Loco Hills

2. The injection intervals will vary across the unit but will generally be a perforated 10 to 25 foot thick zone with tops ranging from 2550 to 2750. The wells will be drilled with the intent of injection but may be produced for a short period of time after initial completion.

3. The wells will be drilled with the intent of injection but may be produced for a short period of time after initial completion.

4. Not Applicable

5. There are no shallower producing horizons in the area of review. There is some deeper Bone Springs and Morrow production in the area.

WEST LOCO HILLS UNIT
INJECTION WELL PROGRAM
NMOCD Form C-108 Sections VII thru XII

VII. Data on proposed operation.

1. Proposed average injection rate: 200 BWPD per well
   Proposed maximum injection rate: 400 BWPD per well

2. The system will be a closed system.

3. Proposed average injection pressure: 500 PSI
   Proposed maximum injection pressure: 510 PSI (This is based on a .2 psi/ft gradient from the top perf)

4. The proposed injection fluid is produced water from the West Loco Hill Unit and produced water form Paddock and Glorieta wells operated by COG and Marbob located about 2-3 miles north of the unit. . Water analysis of these waters is attached.

5. Injection is into a zone productive of oil & gas for the purposes of increased waterflood recovery

VIII. The proposed injection interval is the 4th Grayburg Sand. This Grayburg sand is a Permian age reservoir that is 10-25' thick in this area. The top of the sand is at 2550' to 2750' depending on the location within the unit. There is fresh water well within one mile of the proposed injection based on the attached information provided by the State Engineer. It is located in section 10.

IX. The injection zone will be perforated intervals in the Grayburg and it is expected a small frac job of 15,000 to 20,000 pounds of sand would be applied.

X. Logs will be submitted to the OCD.

XI. There is fresh water well within one mile of the proposed injection. The information for this area as provide by the State Engineer is attached

XII. An examination of this area has determined there are no open faults or other hydrologic connection between the disposal zone and any underground drinking water. These shallow formations are generally not faulted. The casing and cement should isolate the migration of salt water up the borehole. The salt and anhydrite section from around 1900' to 400' will prevent vertical migration in the formation.

West Loco Hills
Grayburg No. 4 Sand Unit

Sec. 10, 11, 12
T18S, R29E

PARENT PATTERN #	40-ACRE PATTERN #	Engr Ref. Well	5-SPOT PATTERN WELL CONFIGURATION			Final Status	
	Wellname		Sec/Unit			Producers	Injectors
35	**WLH G4S Unit #31**	P-52	11J	S	1330' FSL & 2240' FEL	1	0
	WLH G4S Unit #32	I-49	11I	S	1980' FSL & 860' FEL	0	1
	WLH G4S Unit #33	I-51	11K	F	1980' FSL & 2380' FWL	0	1
	WLH G4S Unit #34	I-57	11N	F	660' FSL & 2380' FWL	0	1
	WLH G4S Unit #35	I-62	11P	S	660' FSL & 860' FEL	0	1
35	**WLH G4S Unit #36**	P-46	11H	S	2650' FNL & 10' FEL	1	0
	WLH G4S Unit #37	I-8	12E	F	1980' FNL & 660' FWL	0	1
	WLH G4S Unit #38	I-21	12L	F	1980' FSL & 660' FWL	0	1
	WLH G4S Unit #39	I-45	11H	S	1980' FNL & 660' FEL	0	1
	----------	I-49	11I	--	1980' FSL & 660' FEL	0	1
37	**WLH G4S Unit #40**	P-11	12F	F	2650' FNL & 1330' FWL	1	0
	----------	I-8	12E	--	1980' FNL & 660' FWL	0	1
	WLH G4S Unit #41	I-9	12F	F	1980' FNL & 1980' FWL	0	1
	WLH G4S Unit #42	I-20	12K	F	1980' FSL & 1980' FWL	0	1
	----------	I-21	12L	--	1980' FSL & 660' FWL	0	1
37	**WLH G4S Unit #43**	P-24	12N	F	1310' FSL & 1330' FWL	1	0
	----------	I-20	12K	--	1980' FSL & 1980' FWL	0	0
	----------	I-21	12L	--	1980' FSL & 660' FWL	0	0
	WLH G4S Unit #44	I-25	12M	F	660' FSL & 660' FWL	0	1
	WLH G4S Unit #45	I-26	12N	F	660' FSL & 1980' FWL	0	1
37	**WLH G4S Unit #46**	P-47	11P	S	1310' FSL & 10' FEL	1	0
	----------	I-21	12L	--	1980' FSL & 660' FWL	0	1
	----------	I-25	12M	--	660' FSL & 660' FWL	0	1
	----------	I-49	11I	--	1980' FSL & 860' FEL	0	1
	----------	I-62	11P	--	660' FSL & 860' FEL	0	1
21	**WLH G4S Unit #47**	P-175	10H	F	2630' FNL & 10' FEL	1	0
	WLH G4S Unit #48	I-39	11E	F	1980' FNL & 660' FWL	0	1
	WLH G4S Unit #49	I-55	11L	F	1980' FSL & 660' FWL	0	1
	WLH G4S Unit #50	I-188	10H	F	1980' FNL & 660' FEL	0	1
	WLH G4S Unit #51	I-189	10I	F	1980' FSL & 660' FEL	0	1
21	**WLH G4S Unit #52**	P-40	11F	F	2630' FNL & 1330' FWL	1	0
	----------	I-39	11E	--	1980' FNL & 660' FWL	0	1
	WLH G4S Unit #53	I-43	11F	F	1980' FNL & 1980' FWL	0	1
	----------	I-51	11K	--	1980' FSL & 1980' FWL	0	1
	----------	I-55	11L	--	1980' FSL & 660' FWL	0	1
	Total Well Count					7	16

CASE NO. 4903 NSL 4 UNIT (1973)
Order No. R-4483
330' from the Unit Line & 10' from 1/4 - 1/4 Section

S = State
F= Federal

EnerVest Operating, Ltd.
Drilling Plan
West Loco Hills Field
Location - NA
Eddy County, NM

Rig - TBD
Rig Telephone # - TBD

West Loco Hills Injector Type Well - DRILLING PROGRAM

1 Geologic Name of Surface Formation & Directions to Well

Quaternary

Directions to well: NA

2 Estimated Tops of Important Geologic Markers

MD	SS	Formation	Objective	Rock Type
2,700	800	Grayburg	Primary	(Anhydrite, SS & Dolomite)

3 Estimated Depths of Anticipated Fresh Water, Oil and Gas

MD	SS	Formation	Objective	Fluid Type
2,700	800	Grayburg	Primary	(Oil)

No other formations are expected to give up oil, gas or fresh water in measurable quantities. Setting 8-5/8" casing to 450' and circulating cement back to the surface will protect the surface fresh water sand. All zones containing commercial quantities of oil or gas will have cement circulated across them by cementing the 5-1/2" production casing back to at least the 8-5/8" casing shoe. Cement volumes will be pumped to provide cement back to surface.

4 Casing Program

Hole Size	Interval	OD Casing	Weight	Grade	Conn./New?	Bur/Col/Tens
12-1/4"	0-450'	8-5/8"	24#	J-55	STC/New	12.47 / 3.95 / 26.63
7-7/8"	0-2,800'	4-1/2"	9.50#	J-55	LTC/New	2.98 / 1.54 / 5.72

5 Cement Program

8-5/8" Surface Casing 100% XS	**BLEND** 275 Sks Class "C" 2% $CaCl_2$ (1.32 YLD, 14.8 PPG)
4-1/2" Production Csg 20% XS	**LEAD** 230 SKS 50:50 POZ:C & 2% CaCl2 (11.8 PPG 2.56 CF/SK) **TAIL** 130 SKS CLASS "C" (14.8 PPG 1.33 CF/SK)

6 Minimum Specifications for Pressure Control & Wellhead Equipment

The blowout preventer equipment (BOPE) shown in Exhibit #9 will consist of an annular preventer (5000 psi WP). This unit will be hydraulically operated and will be nippled up on the 8 5/8" surface casing and tested to 2000 psi by a third party. The BOPE will be checked daily and these checks will be noted in the tour sheets. Other accessories to the BOPE (Exhibit #10) will include a kelly cock and floor safety valve, choke lines and a choke manifold (Exhibit #11) and will have a 2000 psi WP rating.

A 2,000 psi WP Larkin Type Wellhead will be used.

7 Types and Characteristics of the Proposed Mud System

The surface hole will be drilled with native or brine water.
The production hole will be drilled with saturated brine water.

DEPTH	TYPE	WEIGHT	VISCOSITY	WATER LOSS
0 - 450'	Native	9.8-10.1	28-30	N.C.
450' - TD	Brine	9.8-10.1	28-30	12 cc

Sufficient mud materials will be kept at the well site to maintain mud properties and meet minimum lost circulation and weight increase requirements at all times.

8 Auxillary Well Control and Monitoring Equipment

A. Kelly cock will be kept in the drill string at all times.

B. A full opening drill pipe-stabbing valve with proper drill pipe connections will be on the rig floor at all times.

9 Logging, Testing and Coring Program

A. The electric logging program will consist of a GR-Dual Laterolog Litho Density log run from TD to the surface casing shoe.

B. A GR-Neutron will be run to surface.

C. No mud logger will be used.

D. No conventional coring is anticipated.

10 Abnormal conditions, Pressure, Temperatures and Potential Hazards

No abnormal pressures or temperatures are anticipated. The estimated bottom hole at TD is 95°F and the estimated maximum bottom hole pressure is 1,000 psi. This well is to be drilled in a pre-existing water flood.

11 Anticipated Starting Date and Duration of Operations

Road and location work will not begin until approval has been received from the BLM. Anticipated Start Date is January 10, 2009.
Once commenced, drilling operations should be finished in approximately 5 days. An additional 30 days will be required for completion, testing and installation of permanent production facilities.

12 Safety

Conduct Tour Safety Meetings with all crews and record topics of these meetings on the IADC and morning reports. Document all personnel in attendence and topics of these Safety Meetings. Keep these documents on file in company representative's office for inspection.

13 Notes

Stamp, Code and Sign all Invoices

H_2S Area? If yes, attach contingency plan.

Inclinations: Survey every 500' or bit trip
Drop Totco every trip out to check the angle. Max inclination = 3°
Call Houston if survey is >= 3°

Mud Disposal: Closed Loop system will be used. Haul off all cuttings and fluids.

BHA #1 **Surface** Slick

BHA #2 **Production** Slick

BIT PROGRAM

			RPM	WOB
Surface	12-1/4"	SEC EBXSC1C	80-100	35k
Production	7-7/8"	SEC EBXS20SR	80-90	40k

WELL	West Loco Hills Injector Type Well		ENERVEST		
TYPE	VERTICAL - Injector	RIG	TBD	DATE	9/23/2008
FIELD	WEST LOCO HILLS	COUNTY	EDDY	ELEVATION	3500'
GAS/OIL	OIL	MUD	TBD	CEMENT	????
LOCATION	????			SBHT	NA

COMMENTS: OBJECTIVE FORMATIONS: GRAYBURG SAND

NOTE:

MUD-LOGGER	SURVEYS	WOB/GPM BIT	FORMATION TOPS HOLE SIZES	VERTICAL DEPTH	MUD WEIGHT	OPEN HOLE LOGS	CEMENT	WELLHEAD	REMARKS
			14" CONDUCTOR	**40'**					
	INCLINATIONS 200' & 400'	5K/300 10K/350 15K/350 SEC EBXSC1C	12-1/4" HOLE		9.8 - 10.1 PPG BRINE				
NO MUD LOGGER		SLICK BHA	**RED BEDS >**			LEAD: 275 Sks Class "C" 2% $CaCl_2$ (1.32 YLD, 14.8 PPG) 100% Excess FLOAT COLLAR & TEXAS PATTERN SHOE			
			SALT >						
			8-5/8" 24# J55 STC	**450'**		TOP OUT: IF NEEDED			
INCLINATIONS EVERY 500' OR AS NEEDED		SEC EBXS20SR 40K/350 GPM 80-90 RPM SLICK BHA	7-7/8" HOLE		9.8 - 10.1 PPG BRINE PUMP HIGH VIS POLY SWEEPS ON CONNECTIONS				
NO MUD LOGGER			**ANHYDRITE / SALT >**						
		40K/350 GPM				< POS WATER INFLUX ~ 1700'			
		40K/350 GPM				OPEN HOLE LOGS: CONTRACTOR TBD TD TO SC: GR / LITHO DENSITY / DUAL LATEROLOG TD TO SURFACE: GR / NEUTRON			
			GRAYBURG SAND (LS/SS) >	**2700'**		LEAD: 230 SKS 50:50 POZ:C & 2% CaCl2 (11.8 PPG 2.56 CF/SK) TAIL: 130 SKS CLASS "C" (14.8 PPG 1.33 CF/SK) (20% EXCESS OVER CALIPER) CEMENT TO SURFACE FLOAT SHOE, 1 JT, FLOAT COLLAR			
			4-1/2 9.50# J55 LTC	**2800'**					

			OFFICE	HOME
AFE #	TBD	REGULATORY		
EV #	TBD	SAFETY, HEALTH & ENVIRONMENTAL		
API #	TBD	GEOLOGIST		

EnerVest Operating, Ltd.
Drilling Plan
West Loco Hills Field
Location - NA
Eddy County, NM

Rig - TBD
Rig Telephone # - TBD

West Loco Hills Producer Type Well - DRILLING PROGRAM

1 Geologic Name of Surface Formation & Directions to Well

Quaternary

Directions to well: NA

2 Estimated Tops of Important Geologic Markers

MD	SS	Formation	Objective	Rock Type
2,700	800	Grayburg	Primary	(Anhydrite, SS & Dolomite)

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No other formations are expected to give up oil, gas or fresh water in measurable quantities. Setting 8-5/8" casing to 450' and circulating cement back to the surface will protect the surface fresh water sand. All zones containing commercial quantities of oil or gas will have cement circulated across them by cementing the 5-1/2" production casing back to at least the 8-5/8" casing shoe. Cement volumes will be pumped to provide cement back to surface.

4 Casing Program

Hole Size	Interval	OD Casing	Weight	Grade	Conn./New?	Bur/Col/Tens
12-1/4"	0-450'	8-5/8"	24#	J-55	STC/New	12.47 / 3.95 / 26.63
7-7/8"	0-2,800'	5-1/2"	15.50#	J-55	LTC/New	3.27 / 1.87 / 5.72

5 Cement Program

8-5/8" Surface Casing 100% XS	**BLEND** 275 Sks Class "C" 2% $CaCl_2$ (1.32 YLD, 14.8 PPG)
5-1/2" Production Csg 20% XS	**LEAD** 175 SKS 50:50 POZ:C & 2% CaCl2 (11.8 PPG 2.56 CF/SK) **TAIL** 100 SKS CLASS "C" (14.8 PPG 1.33 CF/SK)

6 Minimum Specifications for Pressure Control & Wellhead Equipment

The blowout preventer equipment (BOPE) shown in Exhibit #9 will consist of an annular preventer (5000 psi WP). This unit will be hydraulically operated and will be nippled up on the 8 5/8" surface casing and tested to 2000 psi by a third party. The BOPE will be checked daily and these checks will be noted in the tour sheets. Other accessories to the BOPE (Exhibit #10) will include a kelly cock and floor safety valve, choke lines and a choke manifold (Exhibit #11) and will have a 2000 psi WP rating.

A 2,000 psi WP Larkin Type Wellhead will be used.

7 Types and Characteristics of the Proposed Mud System

The surface hole will be drilled with native or brine water.
The production hole will be drilled with saturated brine water.

DEPTH	TYPE	WEIGHT	VISCOSITY	WATER LOSS
0 - 450'	Native	9.8-10.1	28-30	N.C.
450' - TD	Brine	9.8-10.1	28-30	12 cc

Sufficient mud materials will be kept at the well site to maintain mud properties and meet minimum lost circulation and weight increase requirements at all times.

8 Auxillary Well Control and Monitoring Equipment

A. Kelly cock will be kept in the drill string at all times.

B. A full opening drill pipe-stabbing valve with proper drill pipe connections will be on the rig floor at all times.

9 Logging, Testing and Coring Program

A. The electric logging program will consist of a GR-Dual Laterolog Litho Density log run from TD to the surface casing shoe.

B. A GR-Neutron will be run to surface.

C. No mud logger will be used.

D. No conventional coring is anticipated.

10 Abnormal conditions, Pressure, Temperatures and Potential Hazards

No abnormal pressures or temperatures are anticipated. The estimated bottom hole at TD is 95°F and the estimated maximum bottom hole pressure is 1,000 psi. This well is to be drilled in a pre-existing water flood.

11 Anticipated Starting Date and Duration of Operations

Road and location work will not begin until approval has been received from the BLM. Anticipated Start Date is January 10, 2009.
Once commenced, drilling operations should be finished in approximately 5 days. An additional 30 days will be required for completion, testing and installation of permanent production facilities.

12 Safety

Conduct Tour Safety Meetings with all crews and record topics of these meetings on the IADC and morning reports. Document all personnel in attendence and topics of these Safety Meetings. Keep these documents on file in company representative's office for inspection.

13 Notes

Stamp, Code and Sign all Invoices

H_2S Area? If yes, attach contingency plan.

Inclinations: Survey every 500' or bit trip
Drop Totco every trip out to check the angle. Max inclination = 3°
Call Houston if survey is >= 3°

Mud Disposal: Closed Loop system will be used. Haul off all cuttings and fluids.

BHA #1 **Surface** Slick

BHA #2 **Production** Slick

BIT PROGRAM

			RPM	WOB
Surface	12-1/4"	SEC EBXSC1C	80-100	35k
Production	7-7/8"	SEC EBXS20SR	80-90	40k

WELL :	West Loco Hills Producer Type Well		ENERVEST		
TYPE	VERTICAL - PRODUCER	RIG	TBD	DATE	9/23/2008
FIELD	WEST LOCO HILLS	COUNTY	EDDY	ELEVATION	3500'
GAS/OIL	OIL	MUD	TBD	CEMENT	????
LOCATION	????			SBHT	NA

COMMENTS: OBJECTIVE FORMATIONS: GRAYBURG SAND

NOTE:

MUD-LOGGER	SURVEYS	WOB/GPM BIT	FORMATION TOPS HOLE SIZES	VERTICAL DEPTH	MUD WEIGHT	OPEN HOLE LOGS	CEMENT	WELLHEAD	REMARKS
			14" CONDUCTOR	**40'**					
	INCLINATIONS 200' & 400'	5K/300 10K/350 15K/350 SEC EBXSC1C	12-1/4" HOLE		9.8 - 10.1 PPG BRINE				
NO MUD LOGGER		SLICK BHA	**RED BEDS >**						LEAD: 275 Sks Class "C" 2% $CaCl_2$ (1.32 YLD, 14.8 PPG) 100% Excess FLOAT COLLAR & TEXAS PATTERN SHOE
			SALT >						TOP OUT: IF NEEDED
			8-5/8" 24# J55 STC	**450'**					
INCLINATIONS EVERY 500' OR AS NEEDED		SEC EBXS20SR 40K/350 GPM 80-90 RPM SLICK BHA	7-7/8" HOLE		9.8 - 10.1 PPG BRINE				PUMP HIGH VIS POLY SWEEPS ON CONNECTIONS
NO MUD LOGGER			**ANHYDRITE / SALT >**						
		40K/350 GPM							< POS WATER INFLUX ~ 1700'
		40K/350 GPM				OPEN HOLE LOGS: CONTRACTOR TBD TD TO SC: GR / LITHO DENSITY / DUAL LATEROLOG TD TO SURFACE: GR / NEUTRON			
			GRAYBURG SAND (LS/SS) >	**2700'**					LEAD: *175 SKS 50:50 POZ:C & 2% CaCl2 (11.8 PPG 2.56 CF/SK)* TAIL: 100 SKS CLASS "C" (14.8 PPG 1.33 CF/SK) (20% EXCESS OVER CALIPER) CEMENT TO SURFACE FLOAT SHOE, 1 JT, FLOAT COLLAR
			5-1/2 15.50# J55 LTC	**2800'**					

			OFFICE	HOME
AFE #	TBD	REGULATORY		
EV #	TBD	SAFETY, HEALTH & ENVIRONMENTAL		
API #	TBD	GEOLOGIST		