

BOPCO, L.P.
201 MAIN ST.
FORT WORTH, TEXAS 76102-3131
817/390-8400

July 6, 2010

FEDERAL EXPRESS

Bureau of Land Management
Carlsbad District Office
620 E. Green St.
Carlsbad, New Mexico 88220
Attn: Mr. Wesley Ingram

New Mexico State Land Office
Commissioner of Public Lands
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501
Attention: Mr. Pete Martinez

New Mexico Oil Conservation Division
1220 St. Francis
Santa Fe, New Mexico 87505
Attention: Mr. William Jones

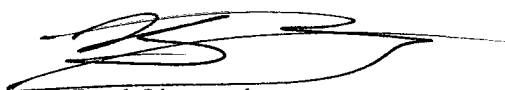
Re: Commercial Determination
James Ranch Unit Well No. 113H
Delaware Formation
Eddy County, New Mexico

Gentlemen:

Please find attached hereto one (1) copy of Bass' commercial determination worksheets and exhibits which indicate that the subject well is a commercial well in the Delaware Formation. Please indicate your concurrence to the above Commercial Determination. Upon your execution hereof, Bass will submit a participating area for the well.

Thank you very much and should you have any questions or comments in regard to the attached commercial determination, please do not hesitate to contact the undersigned.

Very truly yours,



Brad Glasscock

Bureau of Land Management

New Mexico State Land Office

New Mexico Oil Conservation Division

By: _____

By: _____

By: _____

Its: _____

Its: _____

Its: _____

Date: _____

Date: _____

Date: _____

INTER-OFFICE MEMORANDUM
MIDLAND OFFICE

April 6, 2010

TO: FORT WORTH, FILES
FOR: FRANK McCREIGHT
FROM: STEVE F. JOHNSON
RE: COMMERCIAL DETERMINATION
JAMES RANCH UNIT #113H
QUAHADA RIDGE (DELAWARE) SE
EDDY COUNTY, NEW MEXICO
FILE: 100-WF: JRU113HCD.DOC

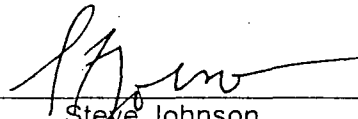
Attached are the worksheets and necessary exhibits for the subject well to be submitted for commercial determination. The James Ranch Unit #113H was drilled in 2009 to a total depth of 12,090' and was completed in the Delaware. The well is producing from perforations 8,035-11,900'. On test 7/31/2009 the well pumped at the rate of 280 BOPD, 141 MCFPD, and 443 BWPD. This well is expected to recover approximately 148.613 MBOE from the current completion.

The most recent price file from Fort Worth was utilized and the oil price was adjusted by - \$3.44/BO. An operating cost of \$9,250/mo plus \$.57/mcf transportation expense was also incorporated in this evaluation. The James Ranch Unit #113H will be a commercial well and should be incorporated into a participating area.

RSD

RSD/cdp

cc: Ross Sutton
George Hillis
Brad Glasscock



Steve Johnson

WORKSHEET FOR COMMERCIAL DETERMINATION AND PARTICIPATING AREA IN FEDERAL UNITS

WELL DATA

WELL James Ranch Unit #113H FORMATION DELAWARE
 LOCATION I UNIT 2000 FEET FROM SOUTH LINE & 200 FEET FROM EAST LINE
 SECTION 36 TOWNSHIP 22S RANGE 30E COUNTY Eddy NEW MEXICO
 SPUD DATE 5/5/2009 COMPLETION DATE 7/16/2009 INITIAL PRODUCTION 7/25/2009
 PERFORATIONS 8035-11900

* BHL 2103' FSL 413' FEL SEC 31, T22S R31E
 STIMULATION:

ACID _____

FRACTURE Frac w/ 4000 gal 15% HCL acid, 28000 gal 7.5% HCL acid, 415593 gal linear gel,
279957 gal 35# XL gel, 129585 gal 20# XL gel, 788718# sd, 47191 gal wtr.

POTENTIAL (7/31/2009): 280 BOPD, 141 MCFPD, 443 BWPD

(Attach Copy of C-105. Attach Copy of Wellbore Sketch of Completed Well.)

VOLUMETRIC CALCULATION

	SANDS PERFORATED		SANDS NOT PERFORATED BUT POTENTIALLY PRODUCTIVE	
Area (A) proration unit size, acres	<u>160</u>	<u> </u>	<u> </u>	<u> </u>
Porosity (Φ), %	<u>11%</u>	<u> </u>	<u> </u>	<u> </u>
Water saturation (Sw), %	<u>36%</u>	<u> </u>	<u> </u>	<u> </u>
Net Thickness (H), ft.	<u>70</u>	<u> </u>	<u> </u>	<u> </u>
Temperature (T), Fahrenheit	<u>120</u>	<u> </u>	<u> </u>	<u> </u>
Bottom Hole pressure (P), psia	<u>3,455</u>	<u> </u>	<u> </u>	<u> </u>
Recovery factor (RF), %	<u>15%</u>	<u> </u>	<u> </u>	<u> </u>
Recoverable Oil, Bbls *(See eq. below)	<u>611,091</u>	<u> </u>	<u> </u>	<u> </u>

*Sometimes unable to match performance due to volumetric uncertainty.

Formula = $(7758) (A) (H) (\Phi) (1-S_w) (1/B_o) (RF)$

B_o = 1.50

Continued

PERFORMANCE DATA

(If sufficient history exists, attach plot of oil production rate v time.)

CUMULATIVE PRODUCTION TO	<u>2/28/2010</u>	<u>34,257</u>	BBL OIL	<u>35,541</u>	MCF
INITIAL RATE (qi)		<u>300</u>			
ECONOMIC LIMIT (ql)		<u>2</u>			
HYPERBOLIC DECLINE RATE, dy		<u>n = 1.01, d = 97.5%/yr</u>			
REMAINING OIL (Q) =		<u>91,538</u>			
ULTIMATE RECOVERABLE OIL (BO)		<u>125,795</u>			

(Attach plot showing proration unit and participating area.)

ECONOMIC

GROSS WELL COST \$2,015,867 (to the depth of formation completed)COMPLETION COST \$977,205GROSS TOTAL COST \$2,993,072

YEAR	GROSS OIL MBBLS	BFIT NET INCOME (\$M)	OPERATING COST (\$M) INCL SEV & AD VAL TAX	5% NET BFIT DISCOUNTED CASH FLOW
ZERO				
1	<u>26.792</u>	<u>1662.7</u>	<u>178.3</u>	<u>-1562.5</u>
2	<u>27.321</u>	<u>2044.2</u>	<u>286.5</u>	<u>1640.3</u>
3	<u>13.593</u>	<u>1082.6</u>	<u>202.9</u>	<u>780.4</u>
4	<u>9.302</u>	<u>749.1</u>	<u>174.6</u>	<u>485.1</u>
5	<u>7.051</u>	<u>572.1</u>	<u>159.6</u>	<u>331.6</u>
6	<u>5.691</u>	<u>465.3</u>	<u>150.6</u>	<u>241.0</u>
7	<u>4.772</u>	<u>394.5</u>	<u>144.6</u>	<u>182.2</u>
8	<u>4.120</u>	<u>344.1</u>	<u>150.3</u>	<u>141.5</u>
9	<u>3.607</u>	<u>305.1</u>	<u>137.0</u>	<u>111.1</u>
10	<u>3.215</u>	<u>275.7</u>	<u>134.5</u>	<u>88.9</u>
REMAINDER	<u>20.331</u>	<u>1776.3</u>	<u>1214.4</u>	<u>296.2</u>
TOTAL	<u>125.795</u>	<u>9671.6</u>	<u>2933.1</u>	<u>2735.7</u>

WELL IS COMMERCIAL

ECONOMIC PROJECTION

Date : 4/6/2010

Lior: 1000421

8:43:48AM

Project Name : PROPZONE2

As Of Date : 01/01/2009

Lease Name : 1000421/JAMES RANCH UNIT/113H/DE

Partner : 99999

Discount Rate (%) : 5.00

Reserv Cat. : Proved Producing

Case Type : LEASE CASE

1000421/JAMES RANCH UNIT/113H/DEL

Field : QUAHADA RIDGE (DELAWARE) SE

Archive Set : CURRENT

Operator : BOPCO

Cum Oil (Mbbbl) : 0.00

Reservoir : DELAWARE

Cum Gas (MMcf) : 0.00

Co., State : EDDY, NM

Risk: 0.000 Inherited/ 0.000 Compounded
Sales

Year	Gross Wet Production		Gross Dry Gas & NGL				
	Oil (Mbbbl)	Wet Gas (MMcf)	Dry Gas (MMcf)	NGL (Mgal)	Oil (Mbbbl)	Gas (MMcf)	NGL (Mgal)
2009	26.792	21.999	10.414	0.000	23.577	9.165	0.000
2010	27.321	33.753	15.979	97.013	24.043	14.061	85.371
2011	13.593	14.069	6.660	67.529	11.962	5.861	59.426
2012	9.302	9.803	4.641	47.056	8.186	4.084	41.410
2013	7.051	7.564	3.581	36.309	6.205	3.151	31.952
2014	5.691	6.214	2.942	29.827	5.008	2.589	26.248
2015	4.772	5.302	2.510	25.450	4.199	2.209	22.396
2016	4.120	4.657	2.205	22.353	3.625	1.940	19.671
2017	3.607	4.148	1.964	19.909	3.174	1.728	17.520
2018	3.215	3.761	1.780	18.051	2.829	1.567	15.885

Rem	20.331	25.639	12.138	123.069	17.891	10.681	108.301
Total	125.795	136.909	64.813	486.566	110.699	57.035	428.178
Ult.	125.795	136.909					

Year	Average Price			Net Revenue			
	Oil (\$/bbl)	Gas (\$/Mcf)	NGL (\$/gal)	Oil (M\$)	Gas (M\$)	NGL (M\$)	Total (M\$)
2009	69.06	3.77	0.00	1,628.11	34.58	0.00	1,662.69
2010	79.33	5.00	0.78	1,907.28	70.35	66.59	2,044.21
2011	83.90	5.56	0.78	1,003.64	32.59	46.35	1,082.58
2012	84.58	5.99	0.78	692.36	24.47	32.30	749.13
2013	85.00	6.26	0.78	527.41	19.74	24.92	572.07
2014	85.44	6.55	0.78	427.92	16.95	20.47	465.34
2015	86.16	6.87	0.78	361.82	15.18	17.47	394.47
2016	86.84	7.21	0.78	314.80	13.98	15.34	344.12
2017	87.70	7.54	0.78	278.36	13.03	13.67	305.05
2018	88.68	7.89	0.78	250.91	12.37	12.39	275.67
Rem	89.39	8.67	0.78	1,599.27	92.57	84.47	1,776.31
Total	81.23	6.06	0.78	8,991.86	345.81	333.98	9,671.65

Year	Expenditures				Future Net Revenue			
	Total Sev Taxes (M\$)	Total Adv Taxes (M\$)	Net Investments (M\$)	Total Net Opcosts (M\$)	Annual (M\$)	Cumulative (M\$)	Disc. Ann. CF 5.00 % (M\$)	Cum. Disc. CF 5.00 % (M\$)
2009	126.18	3.15	2,993.07	48.94	-1,508.65	-1,508.65	-1,562.48	-1,562.48
2010	163.39	4.09	0.00	119.01	1,757.72	249.07	1,640.33	77.85
2011	86.39	2.17	0.00	114.34	879.69	1,128.76	780.35	858.20
2012	59.79	1.50	0.00	113.33	574.51	1,703.28	485.09	1,343.29
2013	45.67	1.14	0.00	112.80	412.46	2,115.74	331.57	1,674.85
2014	37.15	0.93	0.00	112.48	314.78	2,430.52	240.96	1,915.81
2015	31.50	0.79	0.00	112.26	249.92	2,680.44	182.18	2,097.98
2016	27.49	0.69	0.00	112.11	203.85	2,884.28	141.50	2,239.49
2017	24.37	0.61	0.00	111.98	168.09	3,052.37	111.11	2,350.60
2018	22.03	0.55	0.00	111.89	141.20	3,193.57	88.89	2,439.48
Rem	142.00	3.55	0.00	1,068.84	561.92	561.92	296.20	296.20
Total	765.95	19.17	2,993.07	2,137.97	3,755.49	3,755.49	2,735.69	2,735.69

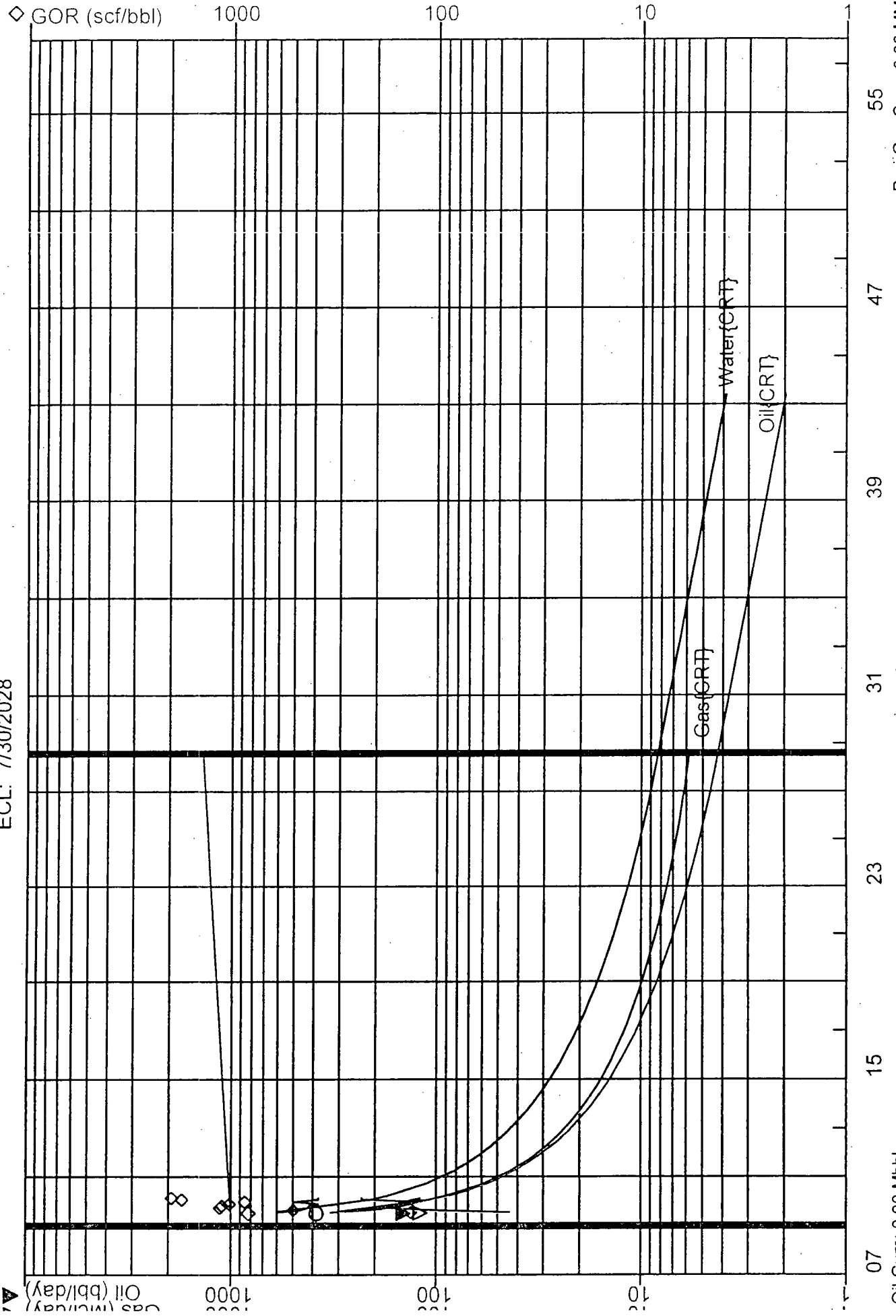
Major Phase : Oil
Perfs : 0
Initial Rate : 2,291.00 bbl/month
Abandonment : 128.00 bbl/month
Initial Decline : 97.55 % year b = 1.001
Beg Ratio : 0.13 Mcf/bbl
End Ratio : 0.00 Mcf/bbl
Forecast Start : 07/01/2009

Working Int : 1.00000000
Revenue Int : 0.88000000
Disc. Initial Invest. (m\$) : 2,993.072
Internal ROR (%) : 40.93
ROI Investment (disc/undisc) : 1.91 / 2.25
Years to Payout : 1.80
Abandonment Date : 07/30/2028

Present Worth Profile (M\$)
5.00% : 2,735.69
9.00% : 2,144.79
10.00% : 2,018.89
12.00% : 1,787.97
15.00% : 1,485.46
20.00% : 1,070.72
30.00% : 461.90
40.00% : 31.08
50.00% : -293.29
60.00% : -548.07

Initial 1st Rev. 2nd Rev.
Working Interest : 1.00000000 0.00000000 0.00000000
Revenue Interest : 0.88000000 0.00000000 0.00000000
Rev. Date :

ECL: 7/30/2028



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other		5. Lease Serial No. NM 02953-C
b. Type of Completion: ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr. Other		6. If Indian, Allottee or Tribe Name
2. Name of Operator EOG Resources Inc.		7. Unit or CA Agreement Name and No.
3. Address P.O. Box 2267 Midland, Texas 79702	3a. Phone No. (include area code) 432-686-3689	8. Lease Name and Well No. James Ranch Unit 113H
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface 2000' FSL & 200' FEL, U/L I At top prod. interval reported below At total depth 2103' FSL & 413' FEL, U/L I, Sec 31		9. API Well No. 30-015-37046
14. Date Spudded 5/5/09		10. Field and Pool, or Exploratory SE Quahada Ridge Delaware
15. Date T.D. Reached 5/20/09		11. Sec., T., R., M., or Block and Survey or Area Sec 36, T22S, R30E
16. Date Completed ☐ D & A ☒ Ready to Prod. 7/25/09		12. County or Parish Eddy
17. Elevations (DF, RKB, RT, GL)* 3316' GL		13. State NM
18. Total Depth: MD 12090 TVD 7655	19. Plug Back T.D.: MD MD TVD TVD	20. Depth Bridge Plug Set: MD MD TVD TVD
21. Type Electric & Other Mechanical Logs Run (Submitt copy of each) CND, Lat		22. Was well cored? ☒ No ☐ Yes (Submit analysis) Was DST run ☒ No ☐ Yes (Submit report) Directional Survey? ☐ No ☒ Yes (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt.(#ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
14-3/4	11-3/4	42/H40		704		270 POZ C,		surface	
						340 PP			
11	8-5/8	32/J55		3872		800 POZ C,		surface	
						200 PP			
7-7/8	5-1/2	17/N80		11220		2265 H & C		surface	
	3-1/2	9.2/L80	11007	12088		130 H		TOL	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2-7/8	6724							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Delaware	7450		8035 - 10850	0.57	111	Producing
B)			11294 - 11900	0.32	48	Producing
C)						
D)						

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Delaware	7450		8035 - 10850	0.57	111	Producing
B)			11294 - 11900	0.32	48	Producing
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
8035 - 11900	Frac w/ 4000 gal 15% HCl acid, 28000 gal 7.5% HCl acid, 415493 gal linear gel, 279957 gal 25 # XL gel, 129585 gal 20 # XL gel, 788718 lbs sand, 47191 gal water

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
7/25/09	7/31/09	24	→	280	141	443	45.0		Pumping
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr.	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	
20/64	390		→				503	POW	

28a. Production-Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

District I
1025 N. Franch Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rin Erazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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 October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-37046	Pool Code 50443	Pool Name Southeast Quabada Ridge - Delaware
Property Code 4060	Property Name JAMES RANCH UNIT	Well Number 113H
OCRID No. 7377	Operator Name EOG RESOURCES, INC.	Elevation 3316.3'

Surface Location

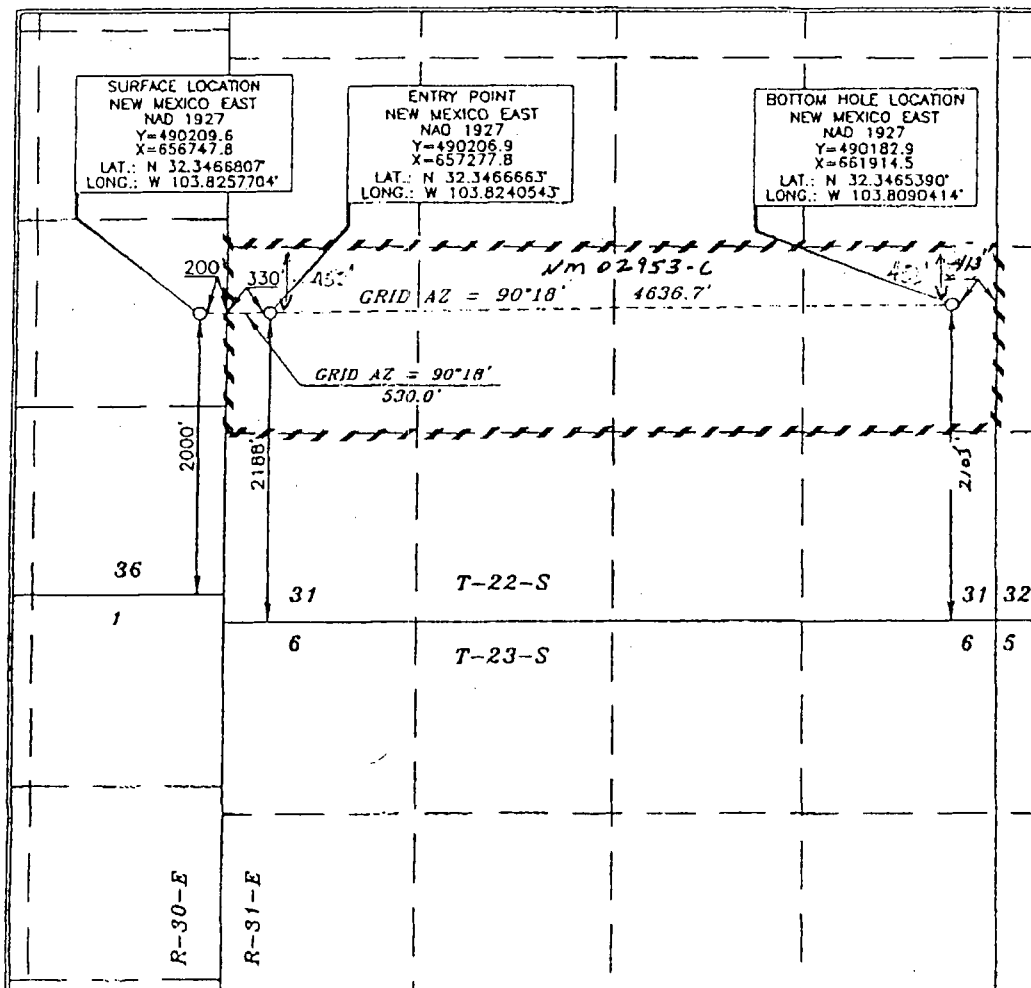
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	36	22 SOUTH	30 EAST, N.M.P.M.		2000	SOUTH	200	EAST	EDDY

Bottom 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
I	31	22 SOUTH	31 EAST, N.M.P.M.		2103	SOUTH	413	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

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.



OPERATOR 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.

Don D. Muth 12/19/08
Signature Date

Donny G. Glatton
Printed Name

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of a professional survey made by me or under my supervision, and that the same is true and correct to the best of my belief.

NOVEMBER 18, 2008
Date of Survey
Signature and Seal of Professional Surveyor
Terry G. Glatton 12/19/08
Certificate Number 15079

CURRENT WELLBORE DIAGRAM

LEASE: JAMES RANCH UNIT WELL #: 113H HORIZONTAL
 FIELD: QUAHADA RIDGE, SE (DELAWARE)
 LOCATION: SL: 2000' FSL & 200' FEL SEC 36 T22S R30E
 BHL: 2150' FSL & 330' FEL SEC 31 T22S R31E
 COUNTY: EDDY ST: NM API# 30-015-37046

****CURRENT****

SEE HORIZONTAL SKETCH

KB: 3335.3'
 GL: 3316.3'
 SPUD DATE: 5/9/2009
 COMP DATE:

SURFACE CASING

SIZE: 11-3/4"
 WT/GRD: 42# H-40
 SET @: 704'
 SX CMT: 270 60/40 C
 SX CMT: 340 Class C
 CIRC: Y 210 sx
 TOC: Surface
 HOLE SIZE: 14-3/4"

INTERMEDIATE CASING

SIZE: 8-5/8"
 WT/GRD: 32# J55
 SET @: 3872'
 SX CMT: 800 Class C
 SX CMT: 200 Class C
 CIRC: Y 316 sx
 TOC: Surface
 HOLE SIZE: 11"

2ND INTERMEDIATE CASING

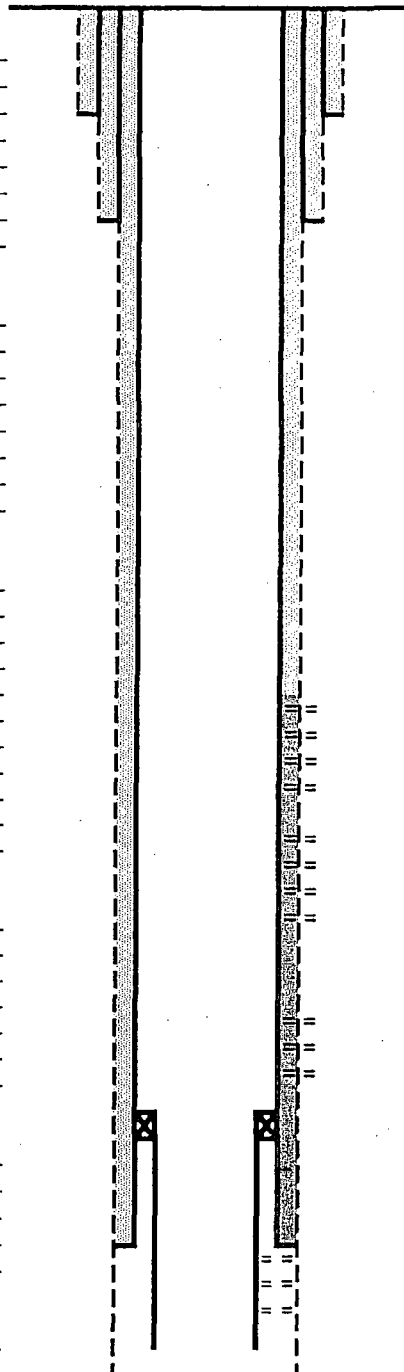
SIZE: 5-1/2"
 WT/GRD: 17# N80
 SET @: 11220'
 1ST STAGE: 450 50/50 PozC
 1000 50/50 PozC
 CIRC: Y 73 sx
 2ND STAGE: 715 50/50 PozC
 SX CMT: 100 Class C
 CIRC: Y 173 sx
 TOC: Surface
 HOLE SIZE: 7-7/8"

Liner

SIZE: 3-1/2"
 WT/GRD: 9.2# L80
 SET @: 12088'
 1st Stg:
 CIRC:
 TOC:
 HOLE SIZE:

TUBING DATA

RODS



704' 11-3/4" CSG 14-3/4" HOLE

3872' 8-5/8" CSG 11" HOLE

4619' DV Tool

8035' Perf (8 holes)
 8300' Perf (9 holes)
 8565' Perf (10 holes)
 8830' Perf (10 holes)

9095' Perf (8 holes)
 9360' Perf (9 holes)
 9625' Perf (10 holes)
 9890' Perf (10 holes)

10155' Perf (8 holes)
 10420' Perf (9 holes)
 10685' Perf (10 holes)

10987' 3-1/2" Liner

SEE HORIZONTAL SECTION DETAIL

11220 5-1/2" CSG 7-7/8" HOLE
 11294' Perf (14 holes)
 11612' Perf (16 holes)
 11900' Perf (18 holes)
 12088' Float Collar
 12090'

PBDT:
 OH: 12090'

7/28/2009
 eaz
 JBB

HORIZONTAL WELLBORE DIAGRAM

LEASE: JAMES RANCH UNIT WELL #: 113H HORIZONTAL
FIELD: SOUTHEAST QUAHADA RIDGE (DELAWARE)
LOCATION: SL: 2000' FSL & 200' FEL, SECTION 36, T22S, R30E
BHL: 2150' FSL & 330' FEL, SECTION 31, T22S, R31E
COUNTY: EDDY ST: NM API #: 30-015-37046

PRODUCTION CASING

SIZE:	5 1/2"
WT/GRD:	17# N80
SET @:	11220'
1st Stg:	450 sx 50/50 PozC
	1000 sx 50/50 PozC
CIRC:	Y 73 sx
2nd Stg:	715 sx 50/50 PozC
	100 sx Class C
CIRC:	Y 173 sx
TOC:	Surface
HOLE SIZE:	7-7/8"

LINER

SIZE:	3-1/2"
WT/GRD:	9.2# L80
SET @:	12088'
1st Stg:	
CIRC:	
TOC:	
HOLE SIZE:	

Updated: 7/28/2009
Author: ezg
Engr: JBB

