

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

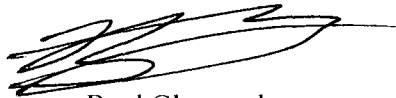
Re: Commercial Determination
James Ranch Unit Well No. 112H
Delaware Formation
Eddy County, New Mexico

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

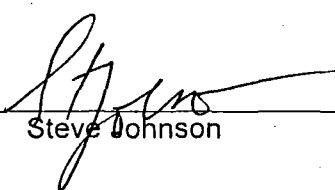
April 5, 2010

TO: FORT WORTH, FILES
FOR: FRANK McCREIGHT
FROM: STEVE F. JOHNSON
RE: COMMERCIAL DETERMINATION
JAMES RANCH UNIT #112H
QUAHADA RIDGE, SE (DELAWARE) FIELD
EDDY COUNTY, NEW MEXICO
FILE: 100-WF: JRU112HD CD.DOC

Attached are the worksheets and necessary exhibits for the subject well to be submitted for commercial determination. The James Ranch Unit #112H was drilled in 2009 to a total depth of 12070' and was completed in the Delaware. The well is producing from perforations 8000-11,289'. On test 4/26/2009 the well pumped at the rate of 195 BOPD, 274 MCFPD, and 346 BWPD. This well is expected to recover approximately 93.999 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 \$9,494/mo plus \$.57/mcf transportation expense was also incorporated in this evaluation. The James Ranch Unit #112H will be a commercial well and should be incorporated into a participating area.


RSD/cdp



Steve Johnson

cc: Ross Sutton
George Hillis
Brad Glasscock

WORKSHEET FOR COMMERCIAL DETERMINATION AND PARTICIPATING AREA IN FEDERAL UNITS

WELL DATA

WELL James Ranch Unit #112H FORMATION DELAWARE
 LOCATION P UNIT, 500 FEET FROM SOUTH LINE & 200 FEET FROM EAST LINE
 SECTION 36 TOWNSHIP 22S RANGE 30E COUNTY Eddy NEW MEXICO
 SPUD DATE 1/12/2009 COMPLETION DATE 4/9/2009 INITIAL PRODUCTION 4/21/2009
 PERFORATIONS 8000-11289

* BHL 800' FSL 407' FEL SEC 31, T22S R31E
 STIMULATION:

ACID _____

FRACTURE Frac w/ 603 bbls 7.5% HCL acid, 1430 bbls 25# linear gel, 8444 BW, 323234# 16/30 sd,
219560 # 20/40 sd, 76864# 16/30 Super LC sd

POTENTIAL (4/26/2009): 195 BOPD, 274 MCFPD, 346 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>	_____
Porosity (Φ), %	<u>11%</u>	_____
Water saturation (Sw), %	<u>37%</u>	_____
Net Thickness (H), ft.	<u>70</u>	_____
Temperature (T), Fahrenheit	<u>120</u>	_____
Bottom Hole pressure (P), psia	<u>3,440</u>	_____
Recovery factor (RF), %	<u>15%</u>	_____
Recoverable Oil, Bbls *(See eq. below)	<u>601,543</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 2/28/2010 37,695 BBL OIL 67,793 MCF

INITIAL RATE (qi) 305

ECONOMIC LIMIT (qi) 1

HYPERBOLIC DECLINE RATE, dy n = 1.01 d = 99.9%/yr

REMAINING OIL (Q) = 37,248

ULTIMATE RECOVERABLE OIL (BO) 74,943

(Attach plat showing proration unit and participating area.)

ECONOMIC

GROSS WELL COST \$1,898,335 (to the depth of formation completed)COMPLETION COST \$833,556GROSS TOTAL COST \$2,731,891

YEAR	GROSS OIL MBBLS	BFIT NET INCOME (\$M)	OPERATING COST (\$M) INCL SEV & AD VAL TAX	5% NET BFIT DISCOUNTED CASH FLOW
ZERO				
1	34.158	2046.0	106.9	-850.5
2	15.161	1154.6	204.6	886.3
3	7.090	573.0	158.4	368.0
4	4.644	379.3	143.4	199.3
5	3.446	283.2	135.9	118.5
6	2.746	227.3	131.6	73.3
7	2.283	190.8	128.8	45.3
8	1.959	165.3	126.8	26.8
9	1.708	145.7	125.2	13.5
10	1.517	131.1	124.1	4.4
REMAINDER	0.230	20.1	19.8	0.2
TOTAL	74.942	5316.4	1405.5	884.9

WELL IS COMMERCIAL

ECONOMIC PROJECTION

Date : 4/5/2010

Lior: 1000420

4:53:04PM

Project Name : PROPZONE2
 Partner : 99999
 Case Type : LEASE CASE
 Archive Set : CURRENT

As Of Date : 01/01/2009
 Discount Rate (%) : 5.00

Lease Name : 1000420/JAMES RANCH UNIT/112H/DE
 Reserv Cat. : Proved Producing
 Field : QUAHADA RIDGE (DELAWARE) SE
 Operator : BOPCO
 Reservoir : DELAWARE
 Co., State : EDDY, NM

1000420/JAMES RANCH UNIT/112H/DEL

Cum Oil (Mbbbl) : 0.00
 Cum Gas (MMcf) : 0.00

Risk: 0.000 Inherited/ 0.000 Compounded

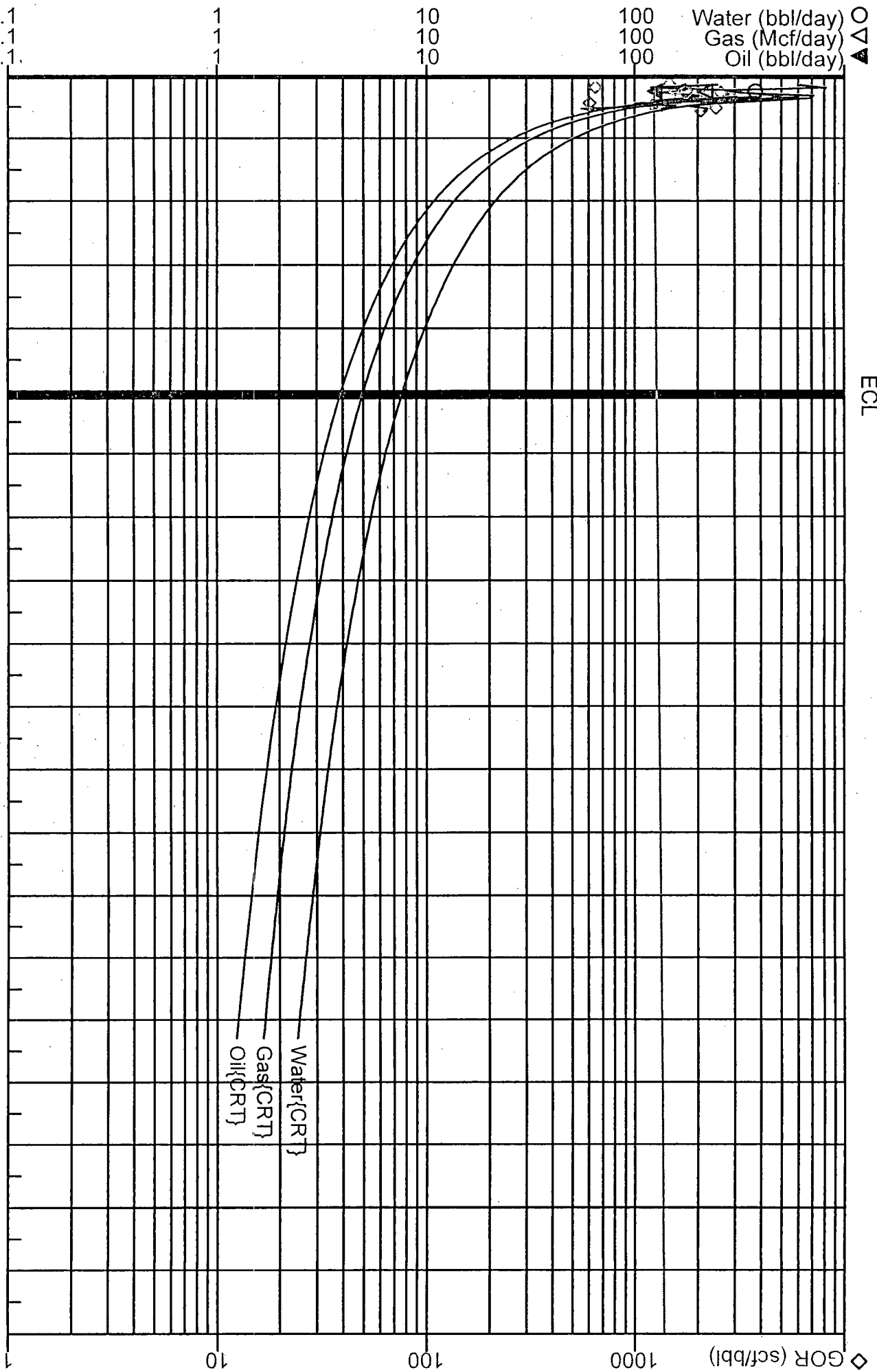
Year	Gross Wet Production		Gross Dry Gas & NGL		Sales		
	Oil (Mbbbl)	Wet Gas (MMcf)	Dry Gas (MMcf)	NGL (Mgal)	Oil (Mbbbl)	Gas (MMcf)	NGL (Mgal)
2009	34.158	59.836	28.326	0.000	30.059	24.927	0.000
2010	15.161	22.388	10.598	69.268	13.342	9.327	60.956
2011	7.090	8.825	4.178	42.361	6.239	3.677	37.278
2012	4.644	5.797	2.745	27.828	4.087	2.415	24.489
2013	3.446	4.314	2.042	20.706	3.032	1.797	18.221
2014	2.746	3.447	1.632	16.548	2.417	1.436	14.562
2015	2.283	2.874	1.361	13.797	2.009	1.197	12.142
2016	1.959	2.473	1.171	11.872	1.724	1.030	10.448
2017	1.708	2.162	1.023	10.377	1.503	0.901	9.132
2018	1.517	1.926	0.912	9.243	1.335	0.802	8.134

Rem	0.230	0.293	0.138	1.404	0.202	0.122	1.236
Total	74.943	114.336	54.126	223.404	65.950	47.631	196.596
Ult	74.943	114.336					

Year	Average Price			Net Revenue			
	Oil (\$/bbl)	Gas (\$/Mcf)	NGL (\$/gal)	Oil (M\$)	Gas (M\$)	NGL (M\$)	Total (M\$)
2009	65.12	3.56	0.00	1,957.32	88.73	0.00	2,046.04
2010	79.52	4.95	0.78	1,060.96	46.12	47.55	1,154.63
2011	83.90	5.56	0.78	523.48	20.44	29.08	572.99
2012	84.58	5.99	0.78	345.68	14.47	19.10	379.25
2013	85.00	6.26	0.78	257.76	11.26	14.21	283.23
2014	85.44	6.55	0.78	206.49	9.40	11.36	227.26
2015	86.16	6.87	0.78	173.12	8.23	9.47	190.83
2016	86.84	7.21	0.78	149.72	7.43	8.15	165.29
2017	87.70	7.54	0.78	131.79	6.79	7.12	145.70
2018	88.68	7.89	0.78	118.37	6.33	6.34	131.05
Rem	89.39	8.63	0.78	18.10	1.05	0.96	20.11
Total	74.95	4.62	0.78	4,942.78	220.25	153.34	5,316.38

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	67.05	1.87	2,731.89	37.98	-792.75	-792.75	-850.54	-850.54
2010	83.09	2.31	0.00	119.24	949.98	157.23	886.29	35.75
2011	41.25	1.15	0.00	116.02	414.57	571.80	367.97	403.72
2012	27.32	0.76	0.00	115.30	235.87	807.68	199.26	602.98
2013	20.41	0.57	0.00	114.95	147.30	954.98	118.47	721.45
2014	16.38	0.45	0.00	114.75	95.67	1,050.65	73.28	794.73
2015	13.76	0.38	0.00	114.61	62.07	1,112.72	45.28	840.02
2016	11.92	0.33	0.00	114.52	38.52	1,151.24	26.77	866.79
2017	10.51	0.29	0.00	114.44	20.45	1,171.70	13.54	880.34
2018	9.46	0.26	0.00	114.39	6.94	1,178.64	4.39	884.73
Rem	1.45	0.04	0.00	18.30	0.32	0.32	0.20	0.20
Total	302.62	8.41	2,731.89	1,094.50	1,178.96	1,178.96	884.92	884.92

Major Phase :	Oil	Working Int :	1.00000000	Present Worth Profile (M\$)	
Perfs :	0 0	Revenue Int :	0.88000000		
Initial Rate :	5,265.00 bbl/month	Disc. Initial Invest. (m\$) :	2,731.891	5.00% :	884.92
Abandonment :	117.68 bbl/month	Internal ROR (%) :	29.12	9.00% :	686.90
Initial Decline :	99.97 % year b = 1.001	ROIInvestment (disc/undisc) :	1.32 / 1.43	10.00% :	641.64
Seg Ratio :	2.88 Mcf/bbl	Years to Payout :	1.75	12.00% :	555.61
End Ratio :	1.27 Mcf/bbl	Abandonment Date :	02/28/2019	15.00% :	436.66
Forecast Start :	09/01/2009			20.00% :	261.26
		Initial	1st Rev.	30.00% :	-24.14
		Working Interest : 1.00000000	0.00000000	40.00% :	-247.58
		Revenue Interest : 0.88000000	0.00000000	50.00% :	-428.19
		Rev. Date :		60.00% :	-577.84



Proj Oil Cum: 0.00 Mbbl
 Oil Rem: 74.94 Mbbl
 C: 112H/DEL

Proj Gas Cum: 0.00 MMcf
 Gas Rem: 114.34 MMcf
 C: 112H/DEL

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other 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 112H			
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface 500 FSL & 200 FEL, U/L P, Sec 36 At top prod. interval reported below At total depth 800 FSL & 407 FEL, U/L P, Sec 31						9. API Well No. 30-015-36722			
14. Date Spudded 1/12/09 15. Date T.D. Reached 1/29/09 16. Date Completed ☐ D & A ☒ Ready to Prod.						10. Field and Pool, or Exploratory Southeast Quahada Ridge; Del			
						11. Sec., T., R., M., or Block and Survey or Area Sec 36, T22S, R30E			
18. Total Depth: MD 12070 TVD 7648				19. Plug Back T.D.: MD 11292 TVD		12. County or Parish Eddy 13. State NM			
21. Type Electric & Other Mechanical Logs Run (Submit copy of each)						17. Elevations (DF, RKB, RT, GL)* 3313 GL			
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
17-1/2	13-3/8	48/H40		653		210 POZ C,		surface	
						340 C			
12-1/4	9-5/8	40/H40		3848		1100 POZ C,		surface	
						200 PP			
8-3/4	5-1/2	17/N80		11391		700 POZ C,		surface	
						1100 POZ H			
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	6868								
25. Producing Intervals				26. Perforation Record					
Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status			
A) Delaware	7450		8000 - 11289	0.42"	111	Producing			
B)									
C)									
D)									
27. Acid, Fracture, Treatment, Cement Squeeze, Etc.									
Depth Interval		Amount and Type of Material							
8000 - 11289		Frac w/ 603 bbls 7.5% HCl acid, 1430 bbls 25 # Linear gel, 323234 lbs 16/30 sand, 219560 lbs 20/40 sand, 76864 lbs 16/30 Super LC sand, 8444 bbls 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
4/21/09	4/26/09	24	→	195	274	346	45.6	.874	Pumping
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr.	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	
32/64	300	160	→				1405	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
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr.	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. →	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	

28c. Production-Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. →	Oil BBL	Gas MCF	Water BBL	Gas: Oil Ratio	Well Status	

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

Sold

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries

31. Formation (Log) Markers

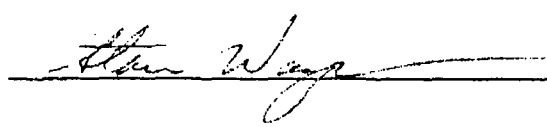
Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
				Rustler	240'
				Lamar	3860'
				Bell Canyon	3890'
				Cherry Canyon	4830'
				Brushy Canyon	6210'
				L. BYCN Marker	7450'

32. Additional remarks (include plugging procedure):

33. Indicate which items have been attached by placing a check in the appropriate boxes:

☒ Electrical/Mechanical Logs (1 full set req'd)
 ☐ Geologic Report
 ☐ DST Report
 ☒ Directional Survey
☐ Sundry Notice for plugging and cement verification
☐ Core Analysis
☐ Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (please print) Stan WagnerTitle Regulatory AnalystSignature Date 4/30/09

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 30-015-36722	Pool Code 50443	Pool Name Southeast Okahoda Ridge - Delaware
Property Code 4060	Property Name JAMES RANCH UNIT	Well Number 112H
OGRIID No. 7377	Operator Name EOG RESOURCES, INC.	Elevation 3313.3'

Surface Location

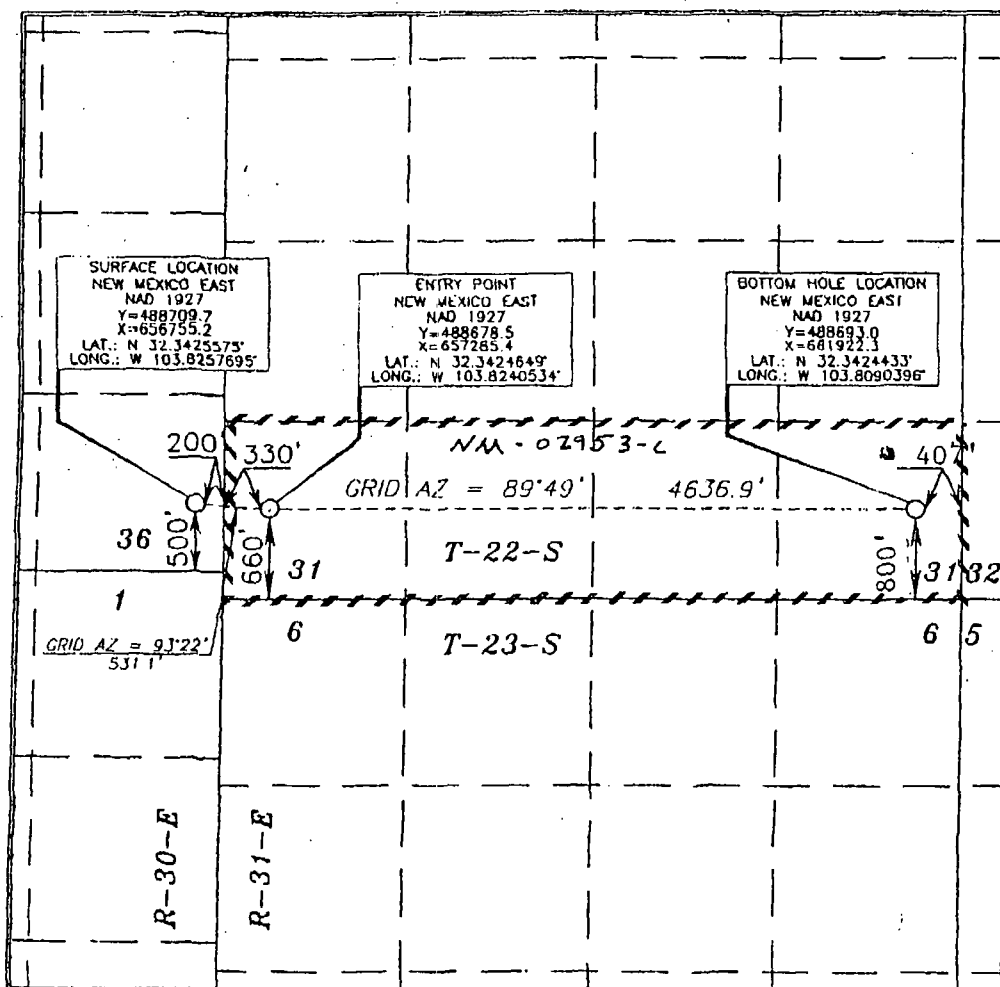
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	36	22 SOUTH	30 EAST, N.M.P.M.		500'	SOUTH	200'	EAST	EDDY

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
P	31	22 SOUTH	31 EAST, N.M.P.M.		800	SOUTH	407	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.

Ang J. Melt 5/5/08
 Signature Date

Donny G. Glaston
Printed Name

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plan 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.

APR 15, 2008

Date of Survey

Signature and Seal of Professional Surveyor

Seal of the Professional Land Surveyors of the State of Texas

15079

15079

Certificate Number

WOF 080475WL (Rev. A)(KA)

CURRENT WELLBORE DIAGRAM

LEASE: JAMES RANCH UNIT **WELL #:** 112H **HORIZONTAL**
FIELD: SOUTHEAST QUAHADA RIDGE (DELAWARE)
LOCATION: SL: 500' FSL & 200' FEL, SECTION 36, T22S, R30E
 BHL: 660' FSL & 330' FEL
COUNTY: EDDY **ST:** NM **API#** 30-015-36722

****CURRENT****

SEE HORIZONTAL SKETCH

KB:
GL: 3313.3'
SPUD DATE: 1/12/2009
COMP DATE:

SURFACE CASING

SIZE: 13-3/8"
WT/GRD: 48# H40
SET @: 653'
SX CMT: 210 35/65 POZ C
SX CMT: 340 Class C
CIRC: Y 83 sx
TOC: Surface
HOLE SIZE:

INTERMEDIATE CASING

SIZE: 9-5/8"
WT/GRD: 40# H40
SET @: 3848'
SX CMT: 1100 35/65/5 Class C
SX CMT: 200 Class C
CIRC: Y 520 sx
TOC: Surface
HOLE SIZE: 12-1/4"

PRODUCTION CASING

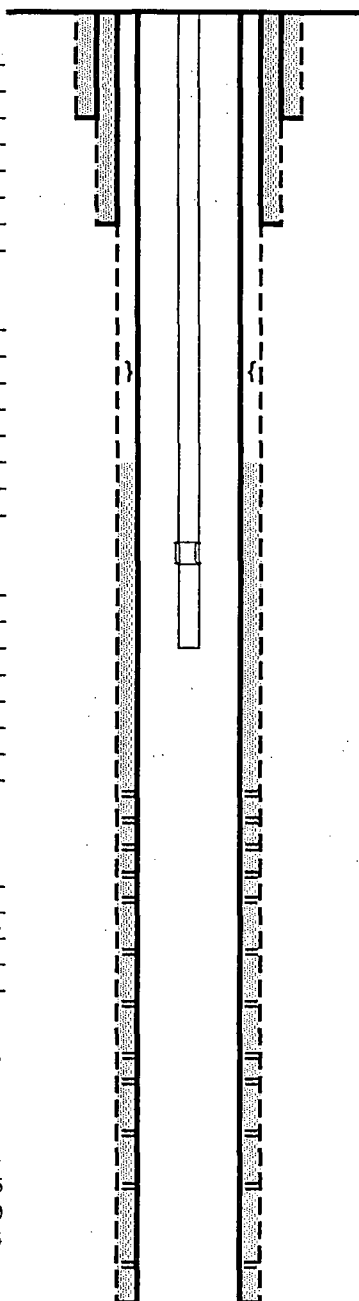
SIZE: 5-1/2"
WT/GRD: 17# N80 LTC
SET @: 11,391'
1st Stg: 410 sx 50/50/10 POZ C
SX CMT: 1100 sx 50/50/2 Class H
CIRC: N
TOC: 4780' TOC (TS)
HOLE SIZE: 8-3/4"

TUBING DATA

RTRY COR & TNSN	21
(207) 2-7/8" 6.5# L-80	6800
TAC 40K# SHR	3
(2) 2-7/8" 6.5# L-80	64
2-7/8" STD SN	1
3-1/2" SLOTTED GAS BUST	32.3
(2) 2-7/8" 6.5# L-80 BP&C	46.7
	6968

Rods

(86) 1" WF97 SCKR	2150
(91) 7/8" WF97 SCKR	2225
(83) 3/4" WF97 SCKR	2075
(12) 1" WF97 SCKR	300
RHBC-HVR	24



653'	13-3/8" CSG	
3489'	9-5/8" 40# CSG 12-1/4" HOLE	
4159'	DV Tool	
4780'	TOC (TS)	
6803'		
6917'	EOT	
7300'	Kick off	
8000'	Perf (8 holes)	
8300'	Perf (9 holes)	
8600'	Perf (10 holes)	
8900'	Perf (10 holes)	
9200'	Perf (8 holes)	
9500'	Perf (9 holes)	
9800'	Perf (10 holes)	
10100'	Perf (10 holes)	
10390'	Perf (8 holes)	
10709'	Perf (9 holes)	
10996'	Perf (10 holes)	
SEE HORIZONTAL SECTION DETAIL		
11285'	Perf (10 holes)	
11,391'	5-1/2" 17# N80	

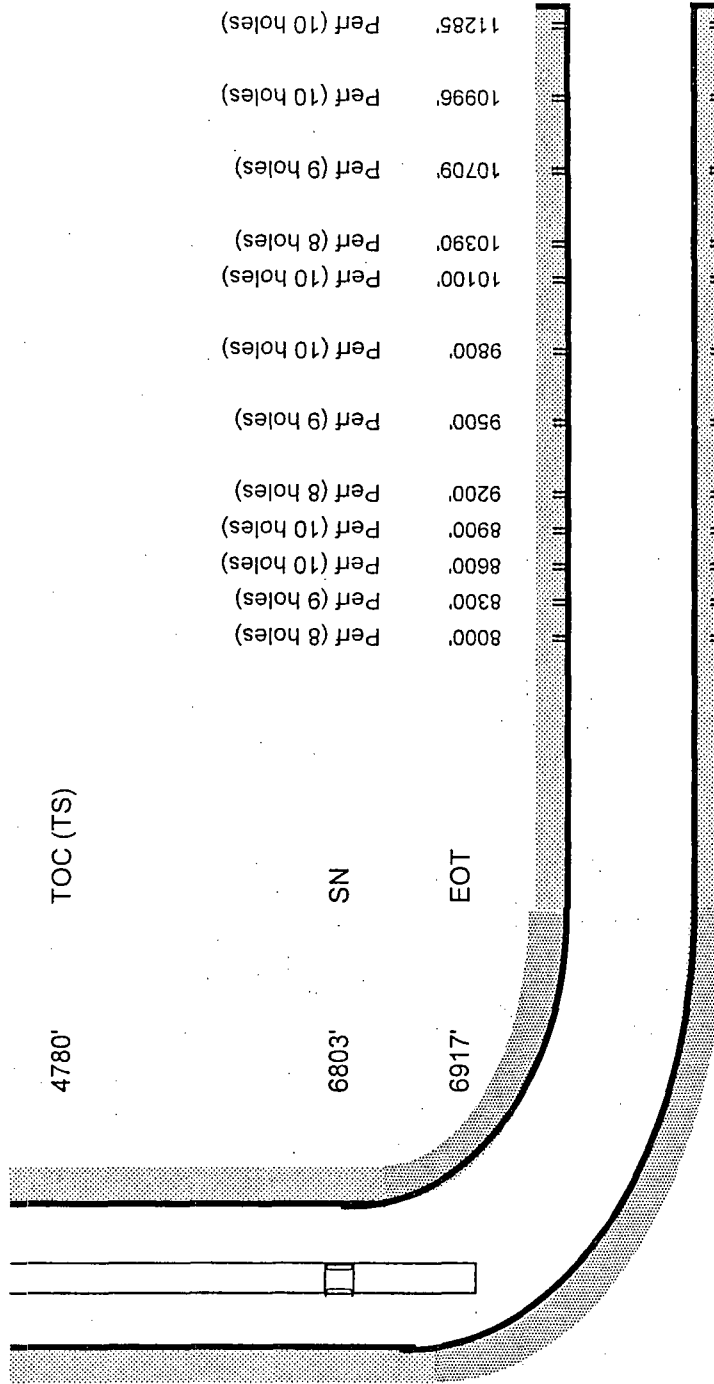
PBTD: 11,292'
TD: 12,070'

6/11/2009
RJR
JBB

LEASE: JAMES RANCH UNIT WELL #: 112H HORIZONTAL
FIELD: SOUTHEAST QUAHADA RIDGE (DELAWARE)
LOCATION: SL: 500' FSL & 200' FEL, SECTION 36, T22S, R30E
BHL: 660' FSL & 330' FEL
COUNTY: EDDY ST: NM API #: 30-015-36722

PRODUCTION CASING

SIZE: 5-1/2"
WT/GRD: 17# N80 LTC
SET @: 11,391'
SX CMT: 410 sx 50/50/10 POZ C
SX CMT: 1100 sx 50/50/2 Class H
CIRC: N
TOC: 4780' TOC (TS)
HOLE SIZE: 8-3/4"



Updated: 8/12/2009
Author: RJR/ezg
Engr: JBB