

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 South First, Artesia, NM 88210
District III
1060 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-104
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
5 Copies

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

Operator name and Address HICKS OIL & GAS, INC. POST OFFICE BOX 3307 FARMINGTON, NEW MEXICO 87499		OGRID Number 010413
		Reason for Filing Code CO
API Number 30 - 0 43-20080	Pool Name Venado Mesa Verde	Pool Code 62490
Property Code 005249	Property Name Jair	Well Number 2

II. Surface Location

UL or lot no. L	Section 8	Township 22N	Range 5W	Lot Idn	Feet from the 1980	North/South line South	Feet from the 660	East/West line West	County Sandoval
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Bottom Hole Location

UL or lot no. SAME AS NUMBER 10	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Loc Code J	Producing Method Code P	Gas Connection Date NA	C-129 Permit Number	C-129 Effective Date	C-129 Expiration Date				

III. Oil and Gas Transporters

Transporter OGRID 9018	Transporter Name and Address GIANT REFINING COMPANY Post Office Box 256 Farmington, N.M. 87499	POD 1095110	O/G O	POD ULSR Location and Description H - Sec 7 - T22N - R5W Jair CPD

IV. Produced Water

POD	POD ULSR Location and Description H - Sec 7 - T22N - R5W, Jair CPD
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V. Well Completion Data

Spud Date	Ready Date	TD	PBTD	Perforations	DUC, DC, MC
Hole Size	Casing & Tubing Size	Depth Set	Sacks Cement		

VI. Well Test Data

Date New Oil	Gas Delivery Date	Test Date	Test Length	Thg. Pressure	Csg. Pressure
Choke Size	Oil	Water	Gas	AOF	Test Method

I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.
Signature:

Printed name: JIM HICKS
Title: President, Hicks Oil & Gas, Inc.
Date: August 31, 1995
Phone: 505/327-4902

OIL CONSERVATION DIVISION

Approved by: SUPERVISOR DISTRICT #3

Approval Date: SEP - 5 1995

If this is a change of operator fill in the OGRID number and name of the previous operator

Previous Operator Signature	Printed Name	Title	Date
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WELL REPORT
APACHE CORPORATION
JAIR #1-8
SANDOVAL COUNTY, NEW MEXICO

WELL REPORT

APACHE CORPORATION: JAIR #1-8

SANDOVAL COUNTY, NEW MEXICO

LOCATION

1980' from the south line and 660' from the west line of Section 8, Township 22 North, Range 5 West, NMPM.

ELEVATION

7026' Ground: 7038' Kelley Bushing

CONTRACTOR

Arapahoe Drilling Company, Rig #2, T-32, Rotary Tools.

SPUD AND COMPLETION DATA

Well commenced: December 28, 1971
Date drilling completed: January 3, 1972
Total Depth 4275' Driller: 4273' Logger

CASING

8 5/8" @ 417' with 280 sacks

ELECTRICAL SURVEYS

Schlumberger - Dual Induction Laterolog - 417' to 4273'
Schlumberger - Formation Density Log - 2600' to 4272'

FORMATION TOPS

<u>Tertiary</u>	<u>Depth</u>	<u>KB Datum</u>
Tertiary Undivided (Tu)	Spud	+7038
Ojo Alamo (Toa)	1404'	+5634
<u>Cretaceous</u>		
Kirtland (Kk)	1540'	+5498
Fruitland (Kf)	1752'	+5286
Pictured Cliffs (Kpc)	1928'	+5110
Lewis (Kl)	2042'	+4996
Chacra (Klc)	2350'	+4688
Cliff House (Kch)	3398'	+3640
Menefee (Kmf)	3515'	+3523
Point Lookout (Kpl)	4246'	+2792
TD Logger	4273'	+2765
TD Driller	4275'	+2763

WELL CUTTINGS

10' samples from 420' to 4275' (Driller TD).

Samples described below from 3500' to 4275' (Driller TD)

SAMPLE DESCRIPTION

TOP MENEFEE 3515' LOGS

3500-20	100% sh, gy, gy grn, gy brn, carb: Tr ss, lt gy, f-g, SA-SR, arkosic, por & friable, <u>N-S</u>
3520-60	90% sh, as above: 10% ss, as above, <u>N-S</u> : Tr coal: occ SA cse clear qtz grs
3560-70	100% sh, as above, bcm silty & sdy in part: Tr ss, gy, v-f-g, shy, tite, arkosic, <u>N-S</u> : Tr coal
3570-3620	100% sh, as above: Tr ss, lt gy, f-g, as above: Tr ss, v-f-g, shy, as above
3620-40	80% sh, as above: 20% ss, wht, f-m-g, SA-SR, arkosic, por, intstl clay, <u>N-S</u> : Tr ss, gy, v-f-g, shy, as above, <u>N-S</u> : Tr coal
3640-60	60% sh, as above: 40% ss, wht, f-m-g, as above, <u>N-S</u> : Tr ss, gy, v-f-g, shy, as above, <u>N-S</u> : Tr coal
3660-80	80% sh, as above: 20% ss, wht, f-g, as above: Tr ss, gy, v-f-g, shy, as above, <u>N-S</u> : Tr coal: Tr diss pyrite
3680-90	90% sh, as above: 10% ss, wht, f-g, as above, <u>N-S</u> : Tr coal
3690-3700	70% sh, as above: 30% ss, wht, f-g, carb inclus, por, as above, <u>N-S</u> : Tr ss, gy, v-f-g, shy, tite, as above, <u>N-S</u> : Tr coal
3700-70	100% sh, as above: Tr ss, wht, f-g, as above: Tr ss, gy, v-f-g, shy, tite, as above: Tr coal
3770-3810	100% sh, as above: Tr ss, gy, v-f-g, shy, tite, <u>N-S</u>
3810-40	100% sh, as above: Tr ss, wht, f-m-g, SA-SR, arkosic, por, friable, intstl clay, <u>N-S</u> : Tr ss, gy, v-f-g, shy, tite, as above, <u>N-S</u> : Tr coal
3840-70	60% sh, as above: 40% ss, wht, f-m-g, as above, <u>N-S</u> : Tr coal
3870-80	90% sh, as above: 10% ss, as above: <u>N-S</u> : Tr coal
3880-90	70% sh, as above: 30% ss, as above: <u>N-S</u> : Tr coal
3890-3900	90% sh, as above: 10% ss, as above: <u>N-S</u> : Tr ss, gy, v-f-g, arkosic, SR, shy, tite, <u>N-S</u> : Tr coal

SAMPLE DESCRIPTION - CONTINUED

3900-20 50% ss, wht, cons-uncons, f-m-g, SA-SR, arkosic, por & friable, N-S: 50% sh, as above: Tr coal

3920-30 80% ss, as above: N-S: 20% sh, as above: Tr coal

3930-50 60% ss, as above, N-S: 40% sh, as above: Tr coal: Tr diss pyrite

3950-60 80% sh, as above: 20% ss, as above, N-S: Tr coal

3960-80 90% sh, as above: 10% ss, as above, occ fltg c-g's, N-S: Tr coal

3980-90 100% sh, as above: Tr ss, as above: Tr coal: Tr ss, gy, v-f-g, shy, tite, N-S

3990 Circ Samples

15" - 100% sh, as above: Tr ss, as above, N-S

30" - 80% ss, wht, cons-uncons, f-m-g, occ c-g's, SA-SR, arkosic, abt intstl clay, por, N-S: 20% sh, as above

45" - 80% ss, as above: 20% sh, as above

3990-4000 50% ss, as above, N-S: 50% sh, as above

4000-10 70% sh, as above: 30% ss, as above, N-S, bcm calc & tite in part

4016 Circ Samples

15" - 70% sh, as above: 30% ss, as above: N-S: Tr coal

30" - 90% sh, as above: 10% ss, as above, bcm finer grained, N-S: Abt coal

45" - 70% sh, as above: 30% ss, wht, f-g, SA-SR, arkosic, intstl clay, por, N-S: Abt coal: Tr ss, f-g, calc & tite as above

Core #1 4016-74, Rec 58'
See Core Record

4075-90 100% sh, gy brn, dk gy, carb: Tr ss, gy, v-f-g, arkosic, shy, tite, N-S

4090-4110 50% ss, buff, f-m-g, occ c-g's, SA-SR, arkosic, porous, intstl clay, lt stn, blue grn fluor, v/sl cut (excell cut when broken): 50% sh, as above

4110-20 80% sh, as above: 20% ss, as above

4120-40 100% sh, as above: Tr ss, as above

4140-60 70% sh, as above: 30% ss, wht, cons-uncons, f-m-g, SA-SR,

SAMPLE DESCRIPTION - CONTINUED

4140-60 Continued
arkosic, abt intstl clay, porous, N-S: Tr ss, buff,
f-m-g, as above, blue grn fluor

4160-4200 100% sh, as above: Tr ss, lt gy, f-g, SA-SR, arkosic,
calc, tite, N-S

4200-10 90% sh, as above: 10% ss, as above, N-S

4210-20 80% ss, wht, cons-uncons, domin uncons, f-m-g, SA-SR,
por, abt intstl clay, N-S: 20% sh, as above

4220-30 50% ss, as above: 50% sh, as above

4230-40 80% ss, as above, N-S: 10% sh, as above

TOP POINT LOOKOUT 4246' LOGS

4240-50 50% ss, buff, f-m-g, occ lse c-g's, SA-SR, arkosic,
por, intstl clay, lt stn, blue grn fluor, good cut:
50% sh, as above

4250-70 80% sh, as above: 20% ss, as above

4270-75 80% ss, wht, f-m-g, SA-SR, arkosic, abt intstl clay,
por, N-S

4275 TD Driller

4273 TD Logger

DRILLING TIME

Five foot drilling time from 3500' to 4275' (Driller TD) is
listed below.

	05-10-15-20-25-30-35-40-45-50-55-60-65-70-75-80-85-90-95-100
3500-3600	15-13- 4- 9-11-14-10- 9- 8-12-14-13-15-12-10-15-17-12- 7-10
3600-3700	17- 7- 7- 6- 6- 6- 9- 6-13-18-17-11-14- 7- 4-10-15-14-11- 7
3700-3800	8-11-15-11-14-13-18-26-22-10-16-21-17-13- 5-11- 9- 6- 6- 4
3800-3900	4- 4- 6- 9-19- 6- 6- 6- 5- 5- 7- 9-13- 8-12- 3- 4- 4- 4- 4
3900-4000	5-10- 7-11- 9-10-10- 9- 5- 9- 9-12-11- 6- 4- 4- 5- 4- 7-11
4000-4100	10-10- 6 Core #1 18-14- 7- 5-10
4100-4200	9-12- 9-10- 6- 7- 9- 9- 7- 6- 8- 9-15-10- 6- 5- 6- 7- 6- 8
4200-4300	6- 7- 6-10- 7- 8-13-16-13-13- 9-12- 8-10-10- TD Driller 4275'

CHRONOLOGICAL LOG

12-29-71 TD 417' WOC
Spud 7:15 P.M. 12-28-71
8 5/8" @ 417' w/280 sacks, 2% CaCl
Bit #1 - YTIA - 417' - 6 1/4 hrs

Rig idle (2 hrs) Rig up (9 1/2 hrs) Rat & Mouse hole (1 3/4 hrs)
Drlg (6 1/4 hrs) Surveys (1/2 hr) Trips (1 1/2 hrs)
Run 8 5/8" csg (1 1/4 hrs) Cement csg (3/4 hrs) WOC (1/2 hr)

CHRONOLOGICAL LOG - CONTINUED

12-30-71 ϕ 1555' w/bit #2
Dev. $3/4^{\circ}$ @ 916'
 $1/2^{\circ}$ @ 1419'

Mud Properties: Vis. 30, WT. 8.8

WOC (11 $1/2$ hrs) Work on pump (2 hrs) Drlg cement (1/2 hr)
Drlg (9 $1/2$ hrs) Survey (1/2 hr)

12-31-71 ϕ 2650' w/bit #3
Bit #2 - SDT - 2038' - 23 $3/4$ hrs

Dev. $1/2^{\circ}$ @ 1920'
 $3/4^{\circ}$ @ 2455'

Mud Properties: Vis. 30, WT. 8.8, WL. 8.8, ck 2/32

Drlg (18 $3/4$ hrs) Trip (3 $1/2$ hrs) Service rig (1/4 hr)
Surveys (1/2 hr) Change ϕ collars (1 hr)

01-01-72 ϕ 3435' with bit #4
Bit #3 - YT3 - 774' - 17 hrs

Dev. $3/4^{\circ}$ @ 2930'
 $3/4^{\circ}$ @ 3229'

Mud Properties: Vis. 30, WT. 9.0, WL. 9.8

Drlg (18 $3/4$ hrs) Service rig (1/4 hr) Surveys (1/2 hr)
Trip (4 $1/2$ hrs)

01-02-72 TD 3824' Trip with bit #5
Bit #4 - SDGH - 595' - 22 hrs

Dev. $1/2^{\circ}$ @ 3824'

Mud Properties: Vis. 42, WT. 9.2

Drlg (15 $3/4$ hrs) Rig service (1/4 hr) Rig repair (3 $3/4$ hrs)
Survey (1/4 hr) Trip (4 hrs)

01-03-72 TD 4074' Trip for bit #7
Bit #5 - YT3 - 192' - 5 $1/4$ hrs

Mud Properties: Vis. 48, WT. 9.8, WL. 4.6, ck 2/32

Wash to bottom (1/4 hr) Drlg (5 $1/4$ hrs) Rig service (1/4 hr)
Circ samples (2 $3/4$ hrs) Trip out & strap ϕ pipe (2 hrs)
Pick up core barrel (1 hr) Trip in w/core barrel (2 hrs)
Coring (5 $3/4$ hrs) Trip out & lay down core barrel (4 $3/4$ hrs)

01-04-72 TD 4275'
Bit #6 - Diamond - 58' - 5 $3/4$ hrs
Bit #7 - DG - 201' - 6 $1/4$ hrs

CHRONOLOGICAL LOG - CONTINUED

01-04-72 Continued
Dev. 1° @ 4275'

Trips (3 3/4 hrs) Drlg (6 3/4 hrs) Rig service (1/4 hr)
Circulate (2 hrs) Survey (1/4 hr) Log by Schlumberger
(5 1/2 hrs) WOO (2 1/2 hrs) WO Halliburton (3 hrs)

01-05-72 Geologist released

BIT RECORD

<u>No.</u>	<u>Make</u>	<u>Size</u>	<u>Type</u>	<u>From</u>	<u>To</u>	<u>Footage</u>	<u>Hours Run</u>
1	Reed	12 1/4	YTIA(RR)	0	417'	417'	6 1/4
2	Smith	7 7/8	SDT	417'	2455'	2038'	23 3/4
3	Reed	7 7/8	YT3	2455'	3229'	774'	17
4	Smith	7 7/8	SDGH	3229'	3824'	595'	22
5	Reed	7 7/8	YT3	3824'	4016'	192'	5 1/4
6	Christensen			4016'	4074'	58'	5 3/4
7	Smith	7 7/8	DG	4074'	4275'	201'	6 1/4

TOTAL ROTATING HOURS - 86 1/4

DEVIATION RECORD

<u>No.</u>	<u>Degree</u>	<u>Depth</u>	<u>Date</u>
1	1/2 °	201'	12-28-71
2	1/4 °	417'	12-29-71
3	3/4 °	916'	12-29-71
4	1/2 °	1419'	12-30-71
5	1/2 °	1920'	12-30-71
6	3/4 °	2455'	12-30-71
7	3/4 °	2930'	12-31-71
8	3/4 °	3229'	12-31-71
9	1/2 °	3824'	01-02-72
10	1 °	4275'	01-03-72

ELECTRICAL SURVEY CALCULATIONS

<u>Formation</u>	<u>Depth</u>	<u>ϕ</u>	<u>Rt</u>	<u>SW</u>
Menefee	4030-44	15	5.5	92%
Menefee	4050-64	15	5.75	88%
Menefee	4080-90	18	9.5	58%
Menefee	4114-28	13	6.0	100%
Menefee	4140-46	15	6.0	86%
Menefee	4185-4204	14	5-8	80%-100%
Menefee	4208-12	18	3.0	100%
Menefee	4218-20	28	7.0	40%
Point Lookout	4248-52	12	6.0	100%
Point Lookout	4258-63	14	4.5	100%

Calculated Rw - .12

CORE RECORD

Core #1: 4016-74' Recovered 58' (4013-71 adj. to logs)

<u>Feet</u>	<u>Depth</u>	<u>Description</u>
4	4016-20	sh, dk gy, carb
1	4020-21	sh, gy brn, sl/sdy, carb
1	4021-22	sh, dk gy, carb
1	4022-23	sltstn, gy, shy, carb inclus
2	4023-25	ss, gy, v-f-g, SR, sl/arkosic, carb inclus, shy, silty, tite, <u>N-S</u>
1	4025-26	ss, tan, v-f-f-g, SR, arkosic, carb inclus, shy, <u>N-S</u>
2	4026-28	coal w/dk gy sh lamin, v/frac 4027-28
6	4028-34	sh, gy brn, carb, v/sl sdy
1	4034-35	ss & sh lamin, (ss, gy, v-f-g, SR, arkosic, shy, silty, tite, <u>N-S</u>)
4	4035-39	ss, lt gy, f-m-g, SA-SR, arkosic, porous, abt intstl clay, occ sh blebs, lamin & carb inclus, <u>N-S</u>

Feet	Depth	Description
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58

One foot coring time from 4016-4074 is listed below

4016-20								16-12-11-11
4020-30	11-	9-	8-	8-	5-	7-	6-	11-12-13
4030-40	11-	8-	15-	9-	5-	6-	5-	3- 3- 4
4040-50	4-	3-	4-	3-	4-	3-	2-	2- 5- 4
4050-60	5-	6-	4-	3-	2-	1-	1-	1- 1- 2
4060-70	2-	1-	1-	1-	2-	2-	1-	2- 5- 6
4070-74	13-	11-	11-	11-				

SP DST #1: 4074-89 (Menefee)

Open 15 minutes: weak blow thru out

Shut In 60 minutes:

Open 132 minutes: strong blow, G-T-S 87 minutes
TSTM

Recovered: 60' oil and gas cut mud, 90' heavily oil and
and gas cut mud, 317' free oil, Grav. 50.8

Initial hydrostatic pressure	1958 psi
Final hydrostatic pressure	1933 psi
Initial flow pressure (1)	26 psi
Final flow pressure (1)	53 psi
Initial flow pressure (2)	53 psi
Final flow pressure (2)	160 psi
Initial shut in pressure	1456 psi
Final shut in pressure	1403 psi

Bottom Hole Temperature - 104°F

SUMMATION

This well was spudded December 28, 1971 and drilling was completed January 3, 1972. 5 1/2" casing will be run to total depth. The well was drilled to a total depth of 4273' Logger: 4275' Driller in the Point Lookout formation of Cretaceous age. A total of 86 1/4 rotating hours were required for the drilling of this test.

All formations from 3500' to 4275' (Driller TD) were evaluated by (1) careful examination of rotary cuttings by a geologist in the field; (2) the entire stratigraphic section was evaluated by quantitative and qualitative analysis of the electrical surveys. A core was cut in the Menefee (4016-74). No show of oil or gas was observed in the core. A sample show was recorded 4090-4110 and 4240-50. These zones correlated to the logs at 4080-90 and 4218-26 respectively. A Straddle test of the Menefee 4074-89 recovered 317' free oil. The pressures and detailed drillstem test are recorded in the text of the report.

The well ran structurally 11' higher than the Apache Corporation: Jair #1-7, located in Section 7, Township 22 North, Range 5 West, Sandoval County, New Mexico, on top of the Point Lookout.

Rotary samples were saved from 420' to total depth and shipped to the Four Corners Sample Cut in Farmington, New Mexico. The core was analyzed by Core Lab. A Dual Induction Laterolog was run from surface casing to total depth. A Formation Density Log was run from 2600' to TD.

Dave M. Thomas Jr.

Dave M. Thomas, Jr.
CPG 914