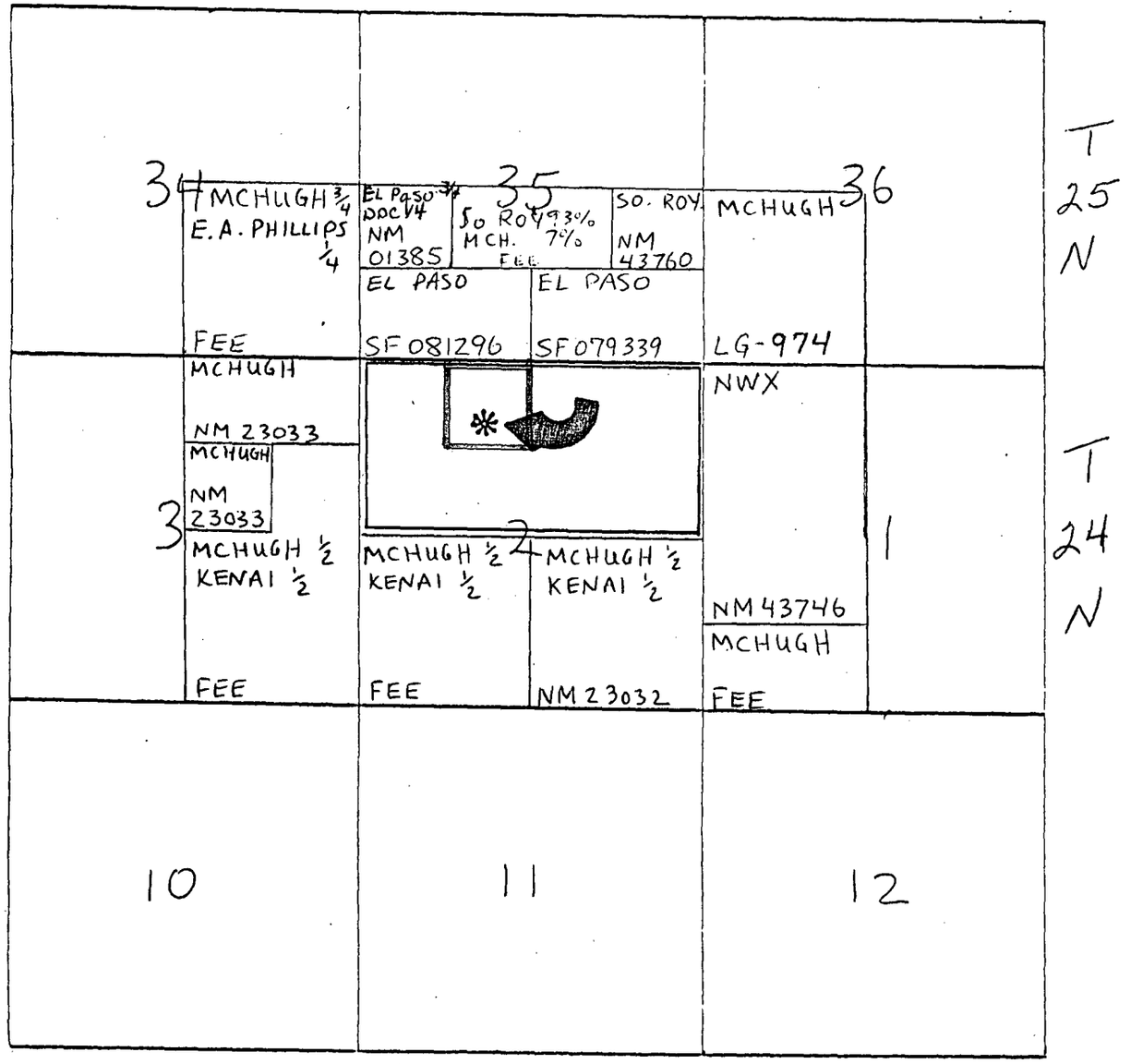


T-24-N, R-2-W, NMPM
Rio Arriba County, New Mexico

Application for Downhole Commingling
Jerome P. McHugh
Wright Way #1 Well
T-24-N, R-2-W, NMPM
Sec. 2: Unit Letter C
950' FNL & 1680' FWL
Rio Arriba Co., New Mexico
Case No. 7968 Exhibit No. 1

OFFSET OPERATORS

Jerome P. McHugh (McHugh)
650 S. Cherry St., #1225
Denver, CO 80222

E.A. Phillips (Phillips)
1200 Philtower Bldg.
Tulsa, OK 74103

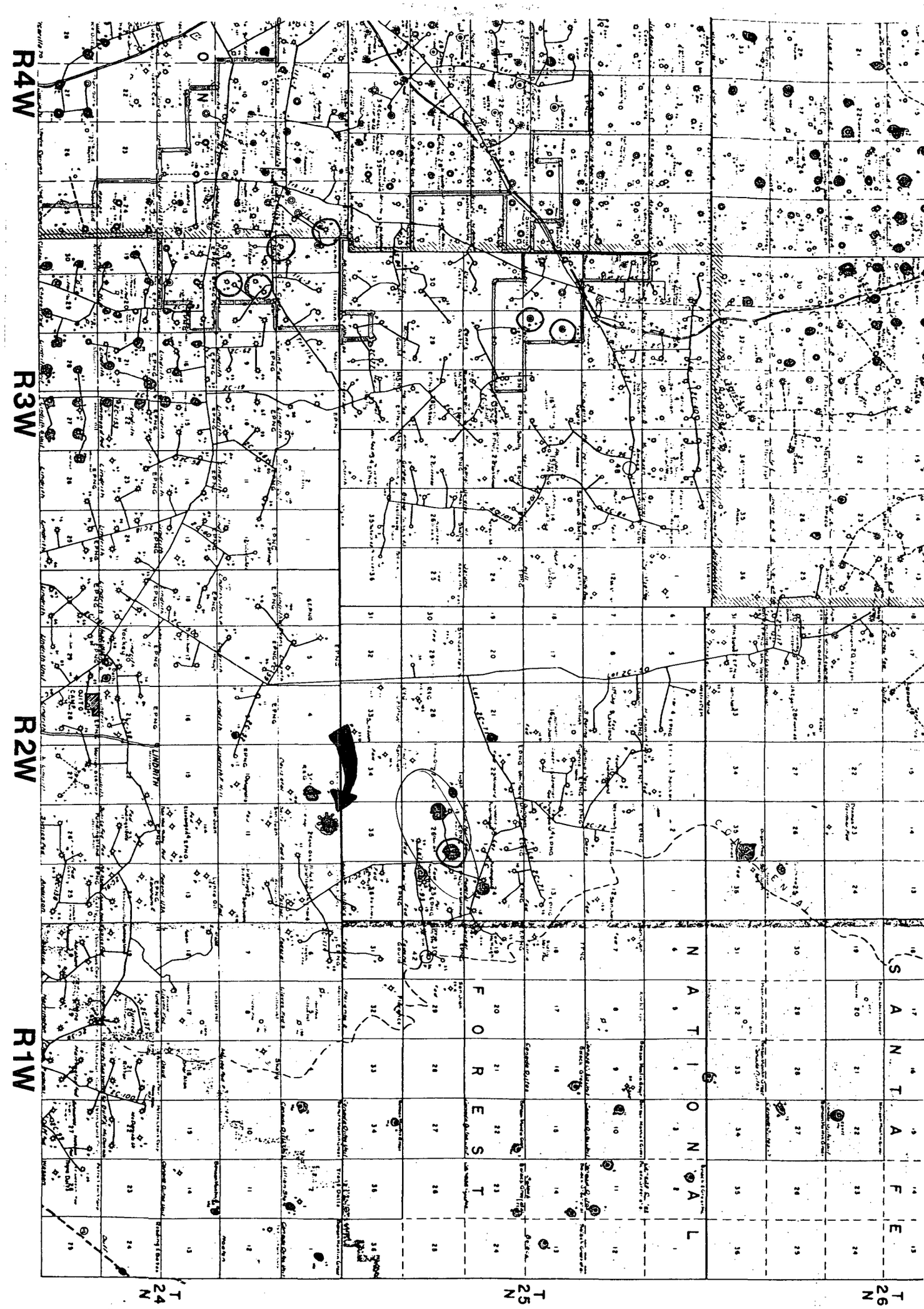
El Paso Natural Gas Company (El Paso)
P.O. Box 1492
El Paso, TX 79978

Dugan Production Corp. (DPC)
P.O. Box 208
Farmington, NM 87499

Southland Royalty Company (So. Roy)
801 Cherry Str.
Ft. Worth, TX 76102

Northwest Exploration Company (NWX)
P.O. Box 5800, Terminal Annex
Denver, CO 80217

Kenai Oil and Gas Inc. (Kenai)
One Barclay Plaza
1675 Larimer Str., Suite 500
Denver, CO 80202



Application for Downhole Commingling
Jerome P. McHugh
Wright Way #1 Well
T-24-N, R-2-W, NMPM
Sec. 2: Unit Letter C
950' FNL & 1680' FWL
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Case No. 7968 Exhibit No. C 2

KEY
- Subject Well
- West Lindrith Gallup-Dakota Pool
- Ojito (Gallup)-Dakota Pool
- Commingled Gallup-Dakota Well
- Dakota Well
- Gallup Well
- Well completed in Gallup & Dakota
- Uncompleted Gallup Well
- Plugged & Abandoned Gallup or Dakota
- Wells used for production data

Application for Downhole Commingling
Jerome P. McHugh
Wright Way #1 Well
T-24-N, R-2-W, NMPM
Sec. 2: Unit Letter C
950' FNL & 1680' FWL
Rio Arriba Co., New Mexico
Case No. 7968 Exhibit No. C3

Welex Induction-Elec. Gamma Log
6-11-83
Elev. 7329' KDB

6700
GALLUP
6714'
6800
6900
7000
7100
7200

Lost 20 bbl mud @ 7030'

Lost 200bbl mud @ 7233'

2"=100'

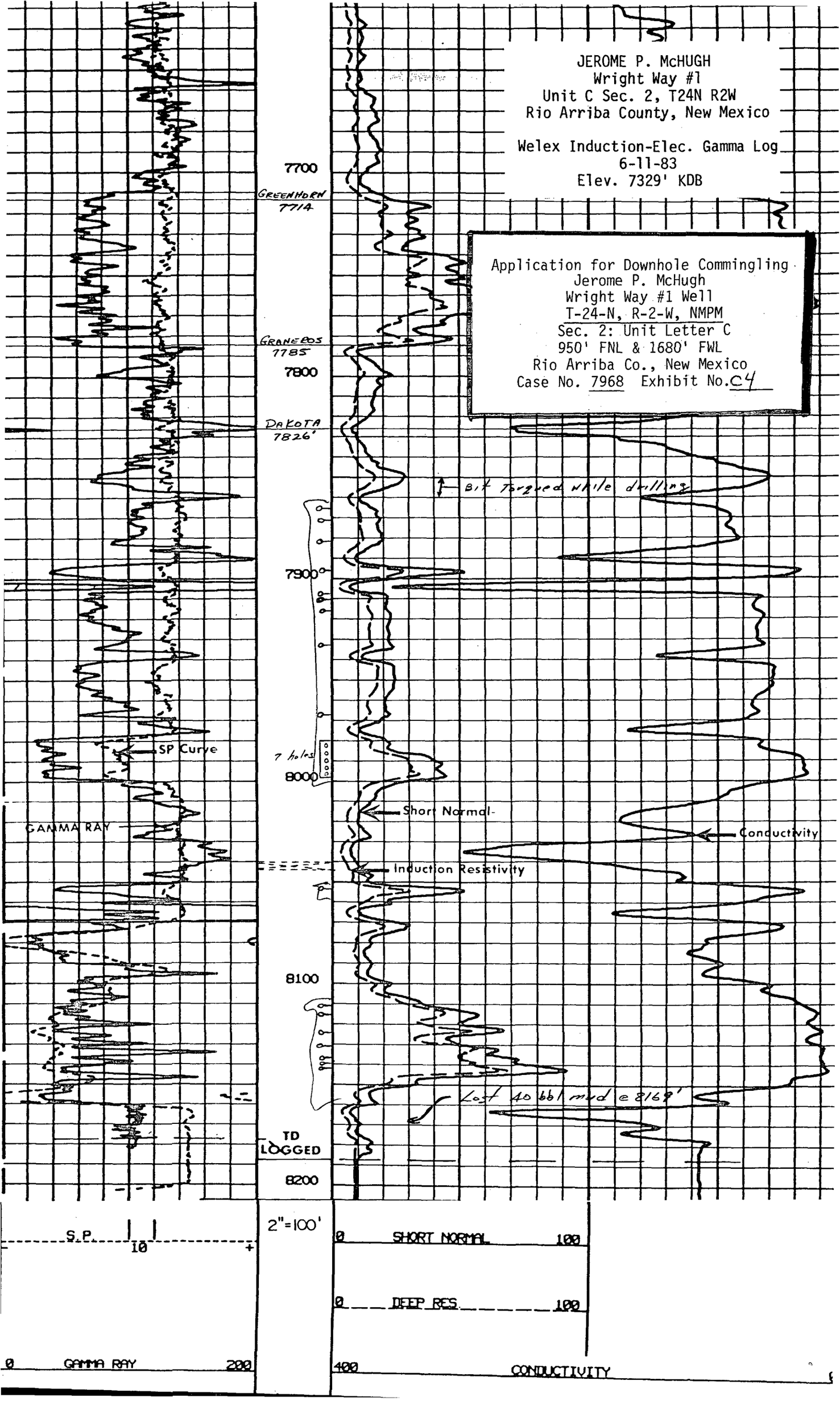
S.P. 10 +

0 GAMMA RAY 200

0 SHORT NORMAL 100

0 DEEP RES. 100

400 CONDUCTIVITY


JEROME P. McHUGH
Wright Way #1
Unit C Sec. 2, T24N R2W
Rio Arriba County, New Mexico
Welex Induction-Elec. Gamma Log
6-11-83
Elev. 7329' KDB
Application for Downhole Commingling
Jerome P. McHugh
Wright Way #1 Well
T-24-N, R-2-W, NMPM
Sec. 2: Unit Letter C
950' FNL & 1680' FWL
Rio Arriba Co., New Mexico
Case No. 7968 Exhibit No. C4
7700
GREENHORN 7714
GRANEROS 7785
7800
DAKOTA 7826'
Bit Torqued while drilling
7900
7 holes
8000
SP Curve
GAMMA RAY
Short Normal
Conductivity
Induction Resistivity
8100
Lost 40 bbl mud @ 8169'
TD LOGGED
8200
S.P.
10
2"=100'
0 SHORT NORMAL 100
0 DEEP RES 100
0 GAMMA RAY 200
400 CONDUCTIVITY

dugan production

Application for Downhole Commingling
Jerome P. McHugh
Wright Way #1 Well
T-24-N, R-2-W, NMPM
Sec. 2: Unit Letter C
950' FNL & 1680' FWL
Rio Arriba Co., New Mexico
Case No. 7968 Exhibit No. C5

JEROME P. McHUGH
Wright Way #1
950' FNL - 1680' FWL
Sec. 2 T24N R2W
Rio Arriba County, NM

MORNING REPORT

5-25-83 253' - W.O.C.
MI & RU Four Corners Drilling Co. Rig #10. Spudded 12¼" hole at 1:00 p.m. 5-24-83. Drilled to 253'. Ran 5 jts. 9-5/8" O.D., 47 #, 8 Rd, LT&C casing. T.E. 233' set at 245' RKB. Cemented with 125 sx class "B" plus 2% $CaCl_2$. (Total slurry 147.5 cf). P.O.B. at 7:30 p.m. 5-24-83. Good cement circulated. ¼° at 100'; 0° at 215'.

6 hrs - MI & RU
1 hr - Drill rat & mouse holes
3-3/4 hrs - drilling 12¼" hole
1/4 hr - circ.
1/4 hr - trip
1-1/4 hrs - run casing
1/2 hr - cement casing
10-1/2 hrs - W.O.C.
1/2 hr - survey

5-26-83 2560' - Drilling Wt. 8.7 Vis 28 W.L. 10.0.
1° at 746'; 1¼° at 1240'; 2¼° at 1601'; 2¼° at 1737';*2° at 1979'; 1½° at 2104'; 2° at 2230'; 2½° at 2354'; 2-3/4° at 2478' *2° at 1854'

1 hr - trip
18 hrs - drilling
1/2 hr - rig service
2-3/4 hrs - survey
1-1/2 hrs - W.O.C.
1/4 hr - wash to bottom

(Pressure tested casing and B.O.P. to 800 psi for 30 minutes before drilling out. Held OK.)

5-27-83 3421' - Mixing mud (lost 65 bbls. at 3421')
Wt. 8.8 Vis 28 W.L. 10.0
2¼° at 2612'; 2° at 2742'; 1½° at 2866'; 1-3/4° at 2988';
1½° at 3097'; 1½° at 3202'; 1½° at 3345'.

5 hrs - trip
15-1/2 hrs - drilling
1/2 hrs - rig service
1-3/4 hrs - surveys
1 hr - wash to bottom
1/4 hr - mixing mud and L.C.M.

5-28-83 3955' Drilling Wt. 8.8 Vis 28 W.L. 11.6
2½°3570'; 1¼° at 3818'; 1° at 3918'

4 hrs - trip
17 hrs - drilling
3/4 hr - rig service
3/4 hr - surveys
1½ hrs - lost circ. at 3625' (150 bbls.)

5-29-83 4515' - Drilling Wt. 8.9 Vis 28 W.L. 11.0 2¼°
2¼° at 4161'; 2½° at 4259'; 2° at 4348'; 2½° at 4443'

22-1/4 hrs - drilling
1/4 hr - rig service
1-1/2 hrs - surveys

5-30-83 4978' - mixing mud Wt. 8.9 Vis 28 W.L. 11.5
3¼° at 4536'; 2¼° at 4566'; 1½° at 4679'; 1° at 4955'

1 hr - trip
20-3/4 hrs - drilling
1 hr - survey
1 hr - lost circ.
1/4 hr - rig service

5-31-83 4978' - Pulling out of hole to pick up drill collars and bumper sub. Regained circulation and started T.O.H. for new bit. Stuck pipe while making trip. Unable to work free. Ran free point and backed off drill pipe.

1/2 hr - mixing mud and lost circ. material
3-3/4 hrs - trip
14-3/4 hrs - work stuck pipe
2-1/2 hrs - run free point and backed off
2-1/2 hrs - circ. after backing off.

6-1-83 5009' - Drilling Wt. 9.0 Vis 50 W.L. 10.0

8 hrs - trip
1-3/4 hrs - drilling
1 hr - pick up fishing tools
1-3/4 hrs - repairs
1-1/4 hrs - circ. top of fish
1 hr - cut drilling line
7-1/4 hrs - wash 2348-3311'
1-1/4 hrs - wash 160'
3/4 hr - jar down on fish

6-2-83 5590' - Drilling Wt. 9.0 Vis 46 W.L. 10.5 1¼° 5514'

22-1/2 hrs - drilling
1/2 hr - rig service
1 hr - survey

6-3-83 6020' - Drilling Wt. 9.0 Vis 46 W.L. 11.0 12% LCM

20-3/4 hrs - drilling
1/2 hr - rig service
2-3/4 hrs - mixing mud and L.C.M. (lost 200 bbls. at 5710')

6-4-83 6400' - Drilling Wt. 9.0 Vis 38 W.L. 11.0 3% LCM
1¼ degree @ 6010'.

23 hrs - drilling
1/4 hr - rig service
3/4 hr - survey

6-5-83 6798' - Drilling (398'/23¼ hrs.). Wt. 9.1# Vis 38 W.L. 10.5
1/4 degree @ 6510'

23-1/4 hrs - drilling
1/2 hr - rig service
1/4 hr - survey

No mud log shows last 24 hours, and no mud loss. Sample top of Mancos - 5925'.

6-6-83 7102' - Drilling Wt. 9.0 Vis 38 W.L. 10.0
3/4 degree @ 6887'.

4-1/2 hrs - trip
18-3/4 hrs - drilling
1/2 hr - rig service
1/4 hr - survey
1/4 hr - wash to bottom

6-7-83 7332' - Drilling Wt. 9.1 Vis 38 W.L. 10.0 Trace LCM
1¼ degree @ 7196'.

4-1/2 hrs - trip
17 hrs - drilling
1/4 hr - rig service
1/4 hr - survey
1/4 hr - wash to bottom
1-3/4 hrs - mix mud & LCM (lost 200 Bbls @ 7233')

6-8-83 7535' - Trip. Wt. 9.0 Vis 40 W.L. 10.0 5% LCM
1/4 degree @ 7535'.

11 hrs - trip
10-3/4 hrs - drilling
1/2 hr - rig service
1/4 hr - survey
1/2 hr - mix mud & LCM (lost 100 Bbls @ 7525')
1 hr - cut drilling line

6-9-83 7787' - Drilling. Wt. 9.1 Vis 38 W.L. 10.8 4% LCM

3 hrs - trip
20 hrs - drilling
1/4 hr - rig service
1/2 hr - cut drilling line
1/4 hr - wash to bottom

6-10-83 8011' - Drilling. Wt. 9.2 Vis 60 W.L. 10.0 3% LCM

23-1/2 hrs - drilling
1/2 hr - rig service

6-11-83 8185' - Short trip. Prep to log. Wt. 9.1 Vis 65
W.L. 9.6 3% L.C.M. 1½° at 8071'

6-1/2 hrs - trip
15 hrs - drilling
1/4 hr - rig service
2 hrs - repairs
1/4 hr - short trip

6-12-83 T.D. 8185' - Laying down drill pipe 1½° at 8185'

6-1/4 hrs - trip
1/4 hr - rig service
3-3/4 hrs - circ.
7-1/2 hrs - logging (Ran IES & CDL CNL logs by Welex)
3/4 hr - cut drilling line
5-1/2 hrs - laying down drill pipe

6-13-83 Finished laying down drill pipe. Rigged up and ran 4½" casing. Unable to gain circulation when getting casing run. Cemented first and 2nd stages without returns. Unable to close bottom stage tool. Prep. to open top stage tool and cement 3rd stage. Detailed casing information will follow on 6-14-83 report.

6-14-83 Ran 210 jts. 4½" O.D., N-80, 11.6#, LT&C casing. T.E. 8196.65' set at 8182' RKB. Attempted to circulate before cementing. Unable to get circulation (hole standing full). Pulled 10 jts. casing and attempted to gain circulation with no success. Re-ran casing to bottom. Mixed pit of mud with viscosity of 45 and 20% L.C.M. Did not get circulation with 400 bbls. mud. Mixed pit of mud and cemented 1st stage with 10 bbls. mud flush followed by 370 sx 50-50 poz plus 2% gel & 6¼# Kolite per sk & ¼# cello flake per sk followed by 100 sx class "B" neat with ¼# cello flake per sk. (Total cement slurry 1st stage 636 cf). No mud returns while cementing. Maximum cementing pressure 800 psi. Bumped plug with 1500 psi. Float held OK. Dropped opening bomb. Opened Dowell stage tool at 5862' (Took 2000 psi to open tool.) Pumped away one pit of mud with no returns through stage tool. Mixed additional pit of mud - 45 vis with 17% L.C.M. Cemented 2nd stage with 10 bbls. mud flush followed by 275 sx 65-35 plus 12% gel and ** ¼# cello flake per sk followed by 310 sx 50-50 pso plus 2% gel and ¼# cello flake per sk. (Total cement slurry 2nd stage 1038 cf) No mud returns while cementing. Over displaced by 25 bbls. Plug did not bump. Dropped opening bomb. Opened stage tool at 3578'. Established circulation. Cemented 3rd stage with 10 bbls. mud flush followed by 500 sx 65-35 plus 12% gel & ¼# cello flake per skfollowed by 110 sx 50-50 pos plus 2% gel and ¼# cello flake per sk (Total cement slurry 3rd stage 1245 cf). Good mud returns while mixing cement and cementing until last 11 bbls. of displacement. Lost partial returns last 11 bbls. Closed stage tool with 2500 psi. Held OK. Job complete at 8:45 a.m. 6-13-83. Set 4½" casing slips. Cut off casing and released rig at 10:45 a.m. 6-13-83.

[**6¼# Kolite per sk and]

DAILY REPORT

6-20-83 MI & RU Farmington Well Service Rig. Picked up 2-3/8" tubing. T.I.H. and drilled top stage tool at 3578'. Circulated hole clean. S.D.O.N.

6-21-83 T.I.H. with tubing and bit to 3993'. Tagged bridge. Rigged up power swivel and cleaned out to 4123'. Returns consisted of lost circ. material - no cement. T.I.H. to 5200'. Hit fill. Circulated hole clean. Pressure tested with rig pump to 2000 psi. Held OK. Rigged up swivel and drilled cement from 5200' to 5483'. Bit started bouncing and pipe torquing. P.O.H. to check bit. One cone loose. S.D.O.N.

6-22-83 Ran in with new 3-7/8" bit, sub and 2-3/8" tubing. Rigged up power swivel and drilled hard cement 5483-5862'. Had trouble drilling 5550-82', and had metal cuttings in returns (think drilling on junk from 3rd stage DV tool). Drilled DV tool at 5862' in 30 minutes with all of the weight of the tubing on the bit. Pressure tested 4½" casing. Could pump in at 2 BPM and 800-1000 psi. Ran in with bit and tagged up at 7745'. Plugged bit. Worked to unplug bit and prepare to clean out. Shut down for night.

6-23-83 Drilled cedar fiber 7737-7833' and junk at 7833' (closing plug and opening bomb?). Drilled hard cement 7833 to float at 8142' (8137' tubing measurement). Circulated hole clean and pulled out of hole with tubing and bit. Shut down for night.

6-24-83 Ran in with 3-7/8" bit, sub, Baker casing scraper and 2-3/8" tubing. Worked and rotated bit and scraper through D.V. tool at 5862'. (5859' tubing measurement). Ran in to 8140'. Pulled out with tubing, bit and scraper. Ran in with Baker retrievamatic packer and mechanical collar locator on 2-3/8" tubing. Set packer at 5860' (set packer in D.V. closing sleeve.). Pressured back side several times with tubing weight set on packer. D.V. tool would not close. Released packer and reset at 5875'. Pressured tubing to 2000 psi. Held OK. Pulled and reset packer at 5529'. Cement squeezed D.V. tool at 5862' with 100 sx class B and displaced with 22 bbl. water at 2 BPM and 750 psi. Shut down and attempted to squeeze as follows:

Wait 10 min. Pump ¼ bbl. & press. to 1100#; bled to 800#.
Wait 10 min. Pump ¼ bbl. & press. to 850#.
Wait 10 min. Pump ¼ bbl. & press. to 1100#; bled to 700#
Wait 10 min. Pump ¼ bbl. & press. to 800#.
Wait 10 min. Pump ¼ bbl. & press. to 1000#.
Wait 15 min. Pump 1/8 bbl. & press. to 1500#.
Wait 15 min. & bleed back. Hole not taking fluid. Did not flow back. Cement top 5674'. Reverse circ. with 40 bbls. water. Pulled 5 stands. Pressured tubing to 1500#. Pressured casing to 1000#.

Shut in for night.

6-25-83 T.O.H. with 2-3/8" tubing, collar locator and packer. T.I.H. with 3-7/8" bit, sub and 2-3/8" tubing. Tagged cement at 5646'. Rigged up power swivel. Drilled soft cement 5726-80'. 2-3 pts to drill, 10-15 min./jt. Circ. hole clean. Shut in for cement to set.

6-26-83 Shut down.

6-27-83 Drilling 5726-5860' - Medium hard cement, 20-25 min./jt. Circ. hole clean. Pressure tested to 2000#. Held OK. T.I.H. to ETD with bit, sub and 2-3/8" tubing. Circ. hole. Rigged up Western Co. and pressure tested casing to 4000#. Held OK. Shut in for night.

6-28-83 Spotted 250 gal. double inhibited 15% HCL at 8125'. T.O.H. with 2-3/8" tubing, sub and 3-7/8" bit. Rigged up Basin Perforators. Recorded Gamma Ray-Collar log over intervals 8153-7700', 7100-6700', 5850-5050', 3500-3250'. Had 3.771" O.D. gauge ring on logging tool.

DK Perforated density log intervals with 1 jet shot at 7865, 71, 81, 96; 7907, 10, 15, 33, 66, 97; 8053; 8111, 15, 23, 31, 37, 39, 41 select fire and 7979, 81, 84, 88, 91 & 94 dual fire.**Broke down interval 7865-8141' with fresh water and established rate - 10 BPM at 1700#. ISIP - 900#. Dropped 36 7/8" balls. Had good ball action with complete ball off. Pumped 145 bbls. water. Ran junk basket and recovered 36 balls with 25 hits indicated. Shut in for night. [**24 holes]

6-29-83 Frac Dakota perfs 7865-8141' with 40,000 gal. 30# gel and 55,000# 20-40 sand with 2% diesel. Ave. injection rate 35 BPM at 2600#. ISIP 1600#; 15 min. 1300#.

10,000 gal. Mini Max 3-30 pad with 2% diesel
10,000 gal. Mini Max 3-30 with 2% diesel and 1# 20-40 sand
10,000 gal. Mini Max 3-30 with 2% diesel and 2# 20-40 sand
10,000 gal. Mini Max 3-30 with 2% diesel and 2½# 20-40 sand
5134 gal. flush.

T.I.H. with retrievable bridge plug on wireline and set at 7600'. Pressure tested to 4000#. Held OK. Poured 1 sk sand down casing and waited 1 hr for sand to fall.

GA Perforated density log interval 6873, 84, 86, 98; 6915, 26, 29, 42, 49, 54, 57, 63, 89; 7006, 13, 41, 48, 54, 61 & 72 select fire. Perf 6855, 59, 63, 66; 7020, 23, 27, 29 dual fire. Perf 6760, 69, 99; 6805, 11, 26, 39 & 49 select fire.

36 holes

Broke down perfs 6760-7072 with fresh water and pumped in at 39 BPM & 3600#. ISIP 400#. Resumed pumping and dropped 54 balls (1 ball/½ bbl.) at 50 BPM at 3200#. Good ball action. Balled off. Ran junk basket. Recovered 20 balls.

Continued

6-29-83 (cont.) Fraced Gallup Perfs 6760-7072 with 60,000 gal. slick water and 82,500# 20-40 sand. Average injection rate = 48 BPM at 2700#. Flush, 15 BPM at 2900#. ISIP = 600 psi.

15,000 gal. slick water pad with 40# AquaSeal/1000 gal.
15,000 gal. slick water w/ 20# AquaSeal/1000 gal. & 1# 20/40 sand
15,000 gal. slick water w/ 10# Aqua Seal/1000 gal. & 2# 20/40 sand
15,000 gal. slick water w/ 10# Aqua Seal/1000 gal. & 2½# 20/40 sand
4,400 gal. slick water - flush

Shut in for night.

6-30-83 Ran in with bridge plug retrieving head on 2-3/8" tubing. Cleaned out sand 6884-7089' circulating with partial returns. Ran in to 7503' and cleaned out sand 7503-7586' with partial returns. Lost approx. 250 bbl. water. Released bridge plug and had flow of water for 30 minutes. Pulled out with 2-3/8" tubing and bridge plug. Shut down for night.

7-1-83 T.I.H. with sawtooth coupling, 1 jt. seating nipple & 2-3/8" tubing. Tagged sand at 8100'. Cleaned out sand to ETD and circulated well bore clean. Well attempting to flow water. Pumped in ±20 bbl. water and killed well. Pulled tubing to 7996' and landed tubing, seating nipple at 7964'. Removed BOP and nippled up well head. Rig released. Shut in.

7-2-83 Shut down

7-3-83 Shut down

7-4-83 Shut down

7-5-83 Move in and Rig up Ponderosa Service Co. swabbing unit. Casing pressure 50 psi; tubing pressure 0. Swabbed well 8 hours. Fluid level at start of day 400' from surface. Swabbed an estimated 200 Bbls. of frac fluid. Casing pressure at end of day 25 psi. Fluid level 1800' at end of day.
S.D.O.N.

7-6-83 Casing pressure 50 psi. Tubing pressure 0. Fluid level first run 600'. Made 32 swab runs. Swabbed an estimated 150 bbls. of frac fluid. Well gassing ahead of swab. Casing pressure at end of day 50 psi. Fluid level at 2200'.

7-7-83 Casing pressure 60 psi; tubing pressure 0.
Fluid level first run 900'. Made 31 swab runs; swabbed an estimated 175 Bbls. of frac fluid. Very slight show of oil until last hour of swabbing. Oil increased to 5%. Casing pressure at end of day 25 psi. Slight show of gas ahead of swab.

7-8-83 Casing pressure 60 psi. Tubing pressure 0.
Fluid level 1200' first run. Made 36 swab runs. Swabbed an estimated 180 Bbls of frac fluid. Very slight show of oil. (oil decreased from previous day). Fluid level at end of day 2600'. Casing pressure 40 psi.

7-9-83 Tank set. 1st new oil pkr gas
Casing pressure 75 psi. Tubing pressure 0.
Fluid level 1200' first run. Swabbed an estimated 180 Bbls of frac fluid. No significant oil. Well gassed while pulling swab. Casing pressure 50 psi at end of day. Fluid level at end of day 2900'.

7-10-83 Shut Down.

7-11-83 Casing pressure 75 psi. Tubing pressure 0.
Fluid level 2300' first run. Made 36 swab runs. Swabbed an estimated 190 bbls. frac fluid. Very slight show of oil and gas. Checked water resistivity of fluid; 1.6 Ohm-meters at 74°, indicates frac fluid. Fluid level at end of day 2500'. Casing pressure 80 psi.

7-12-83 Casing pressure 90; tubing pressure 0.
Fluid level @ 2400'. Made 28 swab runs. Swabbed an estimated 140 Bbls. of frac fluid. Fluid level at end of day 2900'. Casing pressure 90 psi. Very slight show of gas; no oil.

7-13-83 Shut down.

7-14-83 Released swabbing unit.

8-10-83 M.I. & R.U. Shut down for night.

8-11-83 Run in with sand line and check seating nipple @ 8103'. Pulled tubing. Picked up and ran in with 4½" Baker Model "R" packer on 2-3/8" tubing. Set packer @ 7802'. Shut down for night.

8-12-83 Swabbed Dakota perfs 7865-8141' for 6 hrs. making 13 swab runs. Had oil, gas, and water on 1st 3 runs, then water with gas. Swabbed fluid level from 1200' to 3300'. Recovered approximately 40 bbl. water and ½ bbl. oil.

8-13-83 SITP = 0. FL @ 2200'. Made 12 swab runs in 5½ hrs. recovering approximately 50 bbl. water with well gassing while swabbing. Had 200' of oil on 1st run. Fluid level swabbed down to 3300'. Pulled and reset packer @ 6732'. Shut down for unit repairs.
R_w = 1.21 ohm-meters at 100° F.

8-14-83 Shut down.

8-15-83 Swabbed 9 hrs., making 20 swab runs and recovering ± 3 bbl. oil and 100 bbl. water. Fluid level at start of day 2200' and at 4200' at end of day. Recovered approx. 3 bbl. oil on 1st run; then 100% water with gas. Shut in for night.

8-16-83 SITP = 50 psi. Checked fluid level at 3200'. Swabbed 7 hrs., recovering approx. 70 bbl. water with fluid level 3200-4000' and fluctuating between swab runs. Good blow of gas throughout day, with only a trace of oil in water. Pressure tested casing-tubing annulus to 3000 psi. Held OK. Shut down for night.

8-17-83 T.O.H. with 2-3/8" tubing and packer. T.I.H. with bull plug, seating nipple, 1 std, 12' perf subs on 2-3/8" tubing - 217 jts. Set packer at 7127'. Swabbed Gallup perfs 6760-7072' for 3½ hrs. Made 8 runs with fluid level 2000-3500'. Recovered approximately 40 bbl. water with slight amount of oil. Shut in for night.

8-18-83 SITP = SICP = 25 psi. Made 15 swab runs with fluid level standing at 3000' and recovered approximately 3 BO & 75 BW. Oil cut 1-5% and started getting strong gas flow following each swab run on 9th swab run. Casing pressure incr. to 260 psi at end of day. Shut down for night.

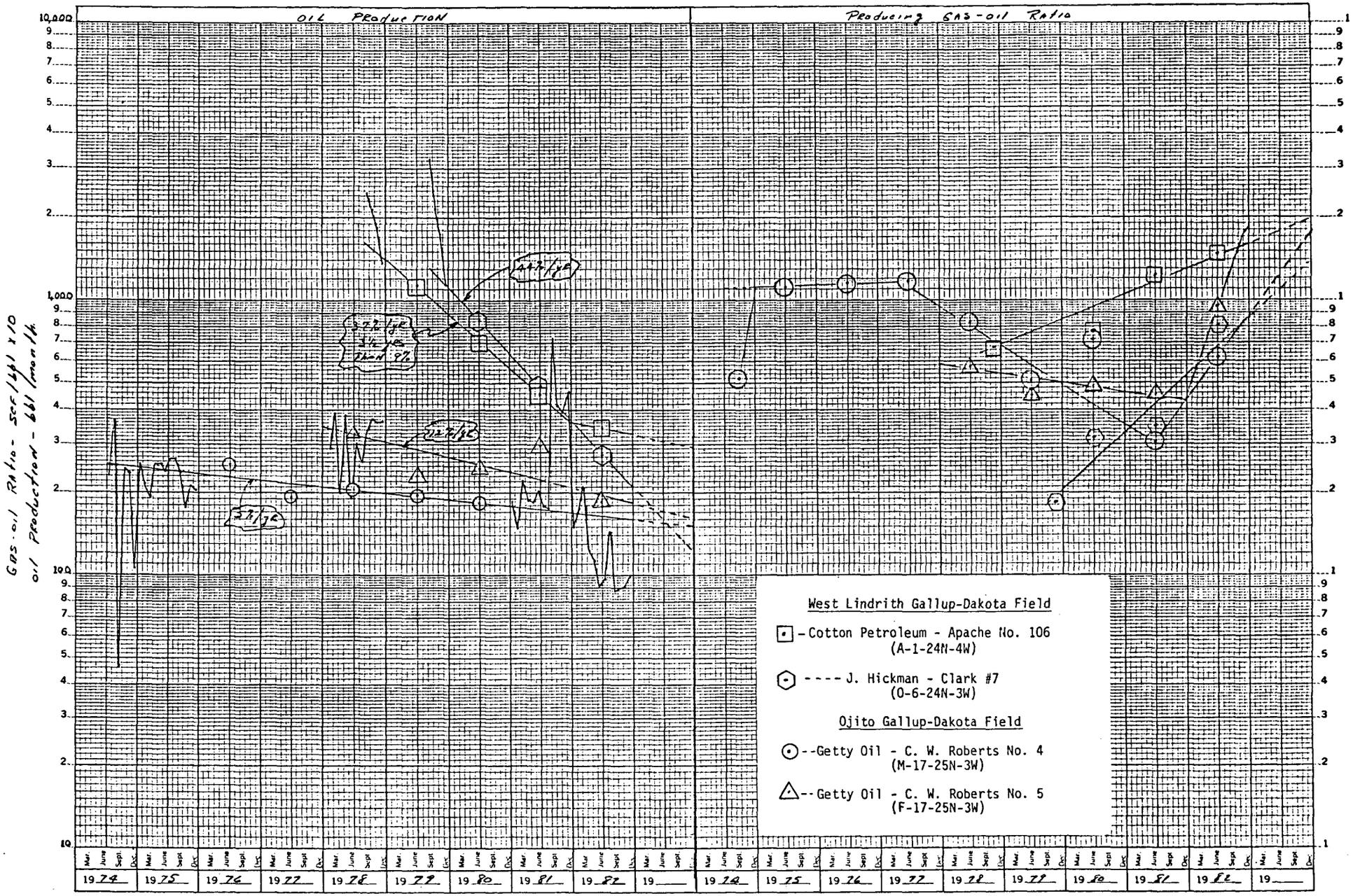
8-19-83 Swabbed well six hours until 2:00 p.m. Casing pressure beginning of day 450 psi. Increased to 620 psi at 2:00 p.m. Swabbing to tank. Good show of oil and well gassing after each swab run. Made decision to land donut and nipple up X-mas tree and release pulling unit. Opened casing to tank. Well unloaded approx. 15 bbls. oil thru casing and died. Unseated model "R" packer. Packer appeared to unseat. While picking up on packer to install donut, packer became stuck. Worked packer one hour. Unable to unseat.

8-20-83 Worked packer three hours. Laid down two joints tubing. Tubing parted while working same. P.O.H. and found tubing parted at approx. 4000'. Shut down to get fishing tools to location.

8-21-83 Shut down - Sunday.

8-22-83 Trip in hole with overshot dressed with 2-3/8" grapple. Caught fish. Worked tubing 3 hrs. Unable to free packer. Backed off tubing manually. Pulled out of hole with 90 stands tubing. Laid down 21 jts. cork-screwed tubing. T.I.H. with tubing and screwed into fish. Rigged up and attempted to run swab mandrel. Unable to get below 5918' with 1-3/4" swab mandrel. S.D.O.N.

Application for Downhole Commingling
Jerome P. McHugh
Wright Way #1 Well
T-24-N, R-2-W, NMPM
Sec. 2: Unit Letter C
950' FNL & 1680' FWL
Rio Arriba Co., New Mexico
Case No. 7968 Exhibit No. 6



K·E 20 YEARS BY MONTHS X 3 LOG CYCLES KEUFFEL & ESSER CO. MADE IN U.S.A.

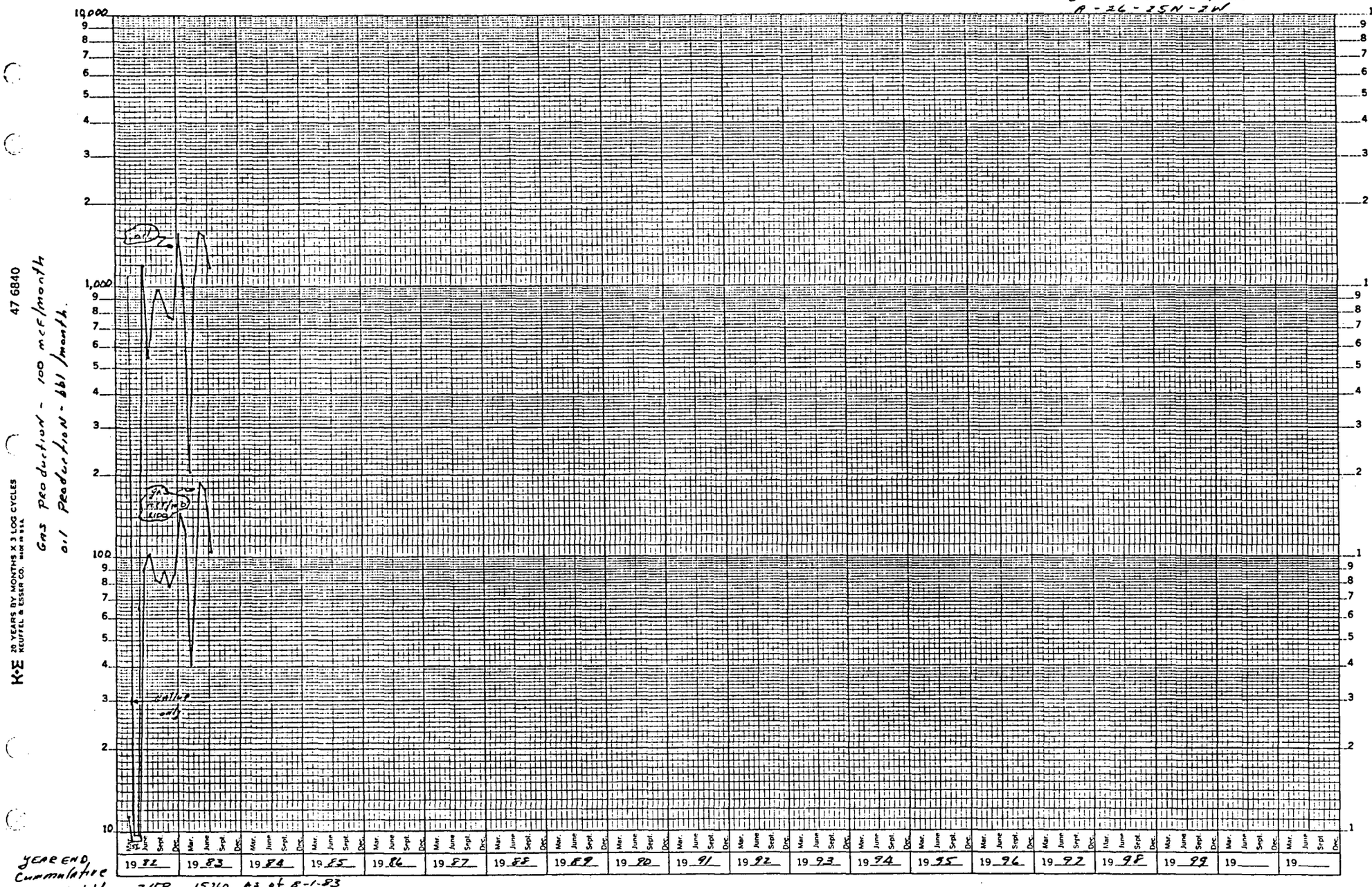
47 6840

WELL DATA
Commingled Gallup-Dakota Wells
General Area of Jerome P. McHugh's Wells in
Townships 24 and 25 North, Range 2 West
Rio Arriba County, New Mexico

Operator	Well Name	Location U-S-T-R	Initial Potential BOPD-GOR	Actual Init.Prod. BOPD-GOR	Oil Production: Production Factor Actual/IP	Oil Production: Initial Decline %/Yr-Yrs	Oil Production: Stabilized Decline % / Yr	Gas Production: Gas Prod. Factor Actual/IP	Gas Production: Incline Rate %/Yr	Cummulative Oil Prod. 1-1-83 - Bbl	Estimated Ultimate Recovery-Bbl
West Lindrith Gallup-Dakota Field											
Cotton Petroleum	- Apache No. 106	A-1-24N-4W	97 - 1526	53 - 6400	55%	37 - 3½	9	4.19	25	41,254	76,800
J. Hickman	- Clark No. 7	O-6-24N-3W	150 - 2666	43 - 1800	29%	44 - --	-	0.68	57	30,597	51,600*
Mobil Oil	- W.D. Hughes No.5	M-8-24N-3W	28 - 179	9 - 1670	32%	29 - --	-	9.33	19	3,896	12,200*
Mobil Oil	- Jillson No. 4	E-8-24N-3W	35 - 857	18 - 840	51%	21 - --	-	0.98	39	7,822	38,500*
Ojito Gallup-Dakota Field											
Getty Oil	- C.W. Roberts No. 4	M-17-25N-3W	9 - 12,220	8 - 11,000	-	5 - --	5	0.90	5	21,031	48,000
Getty Oil	- C.W. Roberts No. 5	F-17-25N-3W	NR - 4,850	12 - 5,800		12 - --	12	1.20	-	14,894	28,000
6 Well Average			64 - 3,716	24 - 4,585	42%	33 - --	9	1.23	29		42,500

* Estimated assuming maintaining initial decline rate for a total of 3½ years from the date of first production and then stabilizing at an annual decline rate of 9%

Northwest Exploration
Gavalin No. 1
Gavalin Gallup / Basin Dakota
A - 26 - 25N - 7W



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K•E 20 YEARS BY MONTHS X 3 LOG CYCLES KEUFFEL & ESSER CO. MADE IN U.S.A.

Year End Cummulative		
Oil, bbl	7,158	15,260 As of 8-1-83
Gas, mcf	62,108	148,907 " " "

Application for Downhole Commingling
Jerome P. McHugh
Wright Way #1 Well
T-24-N, R-2-W, NMPM
Sec. 2: Unit Letter C
950' FNL & 1680' FWL
Rio Arriba Co., New Mexico
Case No. 7968 Exhibit No. C7

RESERVES AND ALLOCATION FACTORS FOR
COMMINGLED GALLUP-DAKOTA WELLS
Townships 24 and 25 North, Range 2 West
Rio Arriba County, New Mexico

	Janet No. 1 R-7258	Janet No. 2 R-7312	E. T. No. 1 Proposed	Mother Lode No. 1 Proposed	Wright Way No. 1 Proposed
OIL (Reserves in bbl.)					
Gallup	39,200 (63%)	35,600 (75%)	40,600 (84%)	43,900 (79%)	28,000 (67%)
Dakota	22,600 (37%)	12,000 (25%)	7,800 (16%)	11,900 (21%)	14,100 (33%)
TOTAL	61,800	47,600	48,400	55,800	42,100
GAS (Reserves in MMCF)					
Gallup	372.4 (82%)	363.1 (90%)	414.1 (94%)	447.8 (91%)	285.6 (85%)
Dakota	79.1 (18%)	42.0 (10%)	27.3 (6%)	41.7 (9%)	49.4 (15%)
TOTAL	451.5	405.1	441.4	489.5	335.0
Indicated Initial Potential Commingled Stream	116 BOPD	86 BOPD	86 BOPD	78 BOPD	78 BOPD
Predicted Initial Production	49 BOPD	36 BOPD	36 BOPD	33 BOPD	33 BOPD