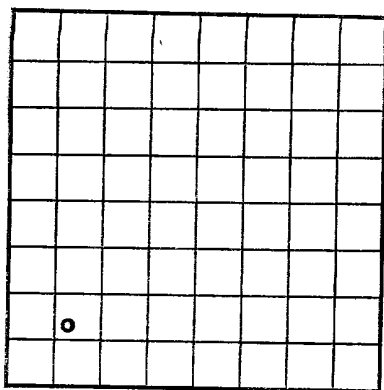




LOCATE WELL CORRECTLY



UNITED STATES

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

U. S. LAND OFFICE Jicarilla-Apache
SERIAL NUMBER Socony Mobil Oil Co.
LEASE OR PERMIT TO PROSPECT 97RECEIVED
MAR 21 1962U. S. GEOLOGICAL SURVEY
WASHINGTON, NEW MEXICO

LOG OF OIL OR GAS WELL

Company Consolidated Oil & Gas, Inc. Address 2112 Tower Building, Denver, Colorado
Lessor or Tract Tribal "C" Field Basin Dakota
Well No. 1-6 Sec. 6 T. 26N R. 3W Meridian NMPM County Rio Arriba
Location 790 ft. [N.] of S Line and 1190 ft. [E.] of W Line of Section 6 Elevation 6960 KB
(Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed [Signature]Date March 16, 1962Title Chief Engineer

The summary on this page is for the condition of the well at above date.

Commenced drilling January 8, 1962 Finished drilling February 15, 1962

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

G No. 1, from 3698 to 3754 No. 4, from _____ to _____
G No. 2, from 5866 to 6009 No. 5, from _____ to _____
G No. 3, from 7900 to 8142 No. 6, from _____ to _____

IMPORTANT WATER SANDS

No. 1, from _____ to _____ No. 3, from _____ to _____
No. 2, from _____ to _____ No. 4, from _____ to _____

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated		Purpose
							From—	To—	
10-3/4"	32.000	8	H-40	297	Guide	3702	3718	Surface	
7-5/8"	26.000	8	H-40	3999	Blow	3702	3718	Production	
Liner 5-1/2"	16.500	8	H-40	8150-3833	Blow	3702	3718	Production	
						7906	7908		
						7918	7928		
						8005	8022		
						8042	8056		
						8086	8110		

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
10-3/4"	297	225	Pump & plug		
7-5/8"	3999	350	" "		
5-1/2"	8150-3833	575	Thru perfs and squeezed	see history	

PLUGS AND ADAPTERS

Heaving plug—Material PBTD 8113' Length _____ Depth set _____
Adapters—Material _____ Size _____

Sand water frac

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
70,000# sand, 72,400 gal. water					3702-3754	
120,000# sand, 130,000 gal. water					7906-8110	in two stages
		spearhead w/1000 gal. acid				

TOOLS USED

Rotary tools were used from 0 feet to 8164 feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

DATES

3-hr. initial potential tests

PC 2/23/62, DK 3/8/62, 19____

Put to producing _____, 19____

The production for the first 24 hours was _____ barrels of fluid of which _____ % was oil; _____ % emulsion; _____ % water; and _____ % sediment. Gravity, °Bé. _____

If gas well, cu. ft. per 24 hours 3040 PC

Gallons gasoline per 1,000 cu. ft. of gas _____

SICP Rock pressure, lbs. per sq. in. 904 PC 2447 DK CAOF 3180

EMPLOYEES

Huron Drilling Co., Driller _____, Driller _____
Contractor, Driller _____, Driller _____

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
Log	Tops: Pictured Cliffs FM	3673'	(+3287)
	Pictured Cliffs SD	3698'	(+3262)
	Pt. Lookout	5866'	(+1094)
	Mancos	6010'	(+ 950)
	Gallup	6821'	(+ 139)
	Greenhorn	7804'	(- 844)
	Dakota	7900'	(- 940)

(OVER)

DRILLING AND COMPLETION HISTORY

CONSOLIDATED OIL & GAS, INC.

TRIBAL "C" NO. 1-6

Rio Arriba County, New Mexico
March 20, 1962

Location: 790' F/SW & 8190' F/WL, Section 6
T28N-R3W, NE1/4

Elevations: 6940' GL
6960' KB - all measurements from KB

Spud: January 8, 1962

Drilling Completed: January 28, 1962
Well Completed: February 16, 1962

Total Depth: 8164' Drilled
8113' PETS

Casing:

Surface: 10 3/4" 32.800' H-40 cemented at 297' w/225 sx.
2% H-45 cement.

Production: 7 5/8" 26.40 & 24# cemented at 3999' with 150
sx. 10% gel cement and 200 sx. 4% gel cement.

5 1/2" liner 3033' - 8150', cemented thru perfs
at 8120-39' w/30 sx.; 6015' w/375 sx.; and at
top w/150 sx.

Tubing: 1 1/2" 2.900' EUE landed at 7822'
1" 13 V50 landed at 3672'

Logs: Welox Induction Electric and Radioactivity Logs

Cores & Drillstem Tests: None

Formation Tops: (Log)

Pictured Cliffs Fm.	3673'	(+3287')
Pictured Cliffs Ss.	3698'	(+3262')
Pt. Lockout	5866'	(+1094')
Mancos	6010'	(+ 950')
Gallup	6821'	(+ 139')
Greenhorn	7804'	(- 844')
Dakota	7900'	(- 940')

Producing Perforations:

<u>Dakota</u>	<u>Pictured Cliffs</u>
7903' - 7905'	3702' - 3718'
7918' - 7920'	3725' - 3734'
8005' - 8022'	3748' - 3754'
8042' - 8066'	
8086' - 8113'	

Treatment:

Dakota - Sand water frac with 120,000# 20-40
sand & 130,000 gal. water.

Pictured Cliffs - Sand water frac with 70,000#
20-40 sand and 72,400 gal. water.

Initial Potential:

Dakota: Flow volume thru 3/4" choke: 726 MCFD

Pictured Cliffs: Flow volume thru 3/4" choke: 3040 MCFD
Calculated Absolute Open Flow Potential: 3180 MCFD

WELL: TRIMBLE "D" NO. 1-6
783' D/ST & 1190' F/WL, Sec. 6-T26N-R3W
FIELD: Don'te L. Torres-Blanco Masavarde- Tacicito PC
COUNTY: San Juan STATE: New Mexico
ELEVATIONS: 640' CD
6500' KB

1/5/62

Moving in rotary rig.

1/6/62

Moving in rotary rig.

1/7/62

Moving in rotary rig.

1/8/62

Drilled mouse hole and rat hole. Preparing to spud surface.

1/9/62

Spud in at 10 a.m. on January 9, 1962. Drilled 300' of 15" hole. Ran ten joints of 10 3/4" 31.30# casing. Set at 297' KB, 266' OL. Cemented with 225 cu. regular regular 2% HA 5. Plug down at 11 p.m. January 9, 1962.

1/10/62

Finished tripping up. Presently Drilling 9 7/8" hole at 680'. Drilled 560' in 12 hours. Commenced drilling at 3 p.m. on January 9. Drilling with water. 3/4" deviation at 750'. Drilling with Bit 1.

1/11/62

Drilling 9 7/8" hole at 1740' with Bit 3. Drilled 880' of sand and shale. Mud 9.9. Vis. 42. Dev. 3/4" at 1200', 1" at 1600'. Pump pressure 400#.

1/12/62

Drilling at 2640' sand and shale. Bit 4. Mud 9.1. Vis. 42. Water loss 12.4. Dev. 1/4" at 2200'. Pump pressure 600#. Drilled 720'.

WELL:

WINDAL "C" NO. 1-6

1/13/62

Depth 2663'. Drilled 103' of sand and shale. Mud 9.8. Vis. 58. Water loss 7.6. Mud cake 2/32. PH 8. Pipe pulling tight at 2440'. Presently installing low clutch on rig.

1/14/62

Depth 2938'. Drilled 275' of sand and shale. Making trip for Bit 6. Mud 9.6. Vis. 36. Water loss 13. Mud cake 2/32.

1/15/62

Depth 3304'. Drilled 336' of sand and shale. Bit 7 in hole. presently drilling. Mud 9.5. Vis. 40. Having no trouble with trips. Water loss 8. Mud cake 1.5/32. PH 8.5. 11.5 hours drilling time, 12.5 hours down time and trip time. Down time due to circulating line and gas line freezing.

1/16/62

Depth 3514'. Drilled 210' of sand and shale. Drilling with Bit 8. 13 3/4 hours drilling time, 6 1/2 hours trip time. Mud 9.6. Water loss 9. Mud cake 2/32. PH 8.3. Dev. 1/2° at 3400'.

1/17/62

Depth 3607'. Drilled 293' of sand and shale in 17 1/2 hours. Drilling with Bit 9. Mud 9.8. Vis. 40. Water loss 7.2. PH 8.5. Should make a trip for Bit 10 but waiting on low clutch for rig. (Low clutch out again.)

1/18/62

Depth 3607'. Drilling closed with Bit 10. Drilled 83'. Lost circulation at 3000'. Approximately 400 bbls. mud and lost circulation material added, mud system contains approximately 10% lost circulation material. Mud 9. Vis. 40. Water loss 6.6. Mud cake 2/32. 6 hour drilling time, 5 hours trip for Bit 10, 11 3/4 hours lost circulation, waiting on water due to trouble with first water truck, two trucks presently hauling, plenty of water on hand, water hole holding up OK.

1/19/62

Laying down drill collars preparing to run 7 5/8" casing. Depth 4000'. Drilled 114' of sand and shale. Conditioned hole, made short trip, pulled out of hole to log. Mud 9.4. Vis. 72. Water loss 6.8. Started logging at 8 p.m. 1/18. Run BS log from 4002' to surface. Run Sonic log from 4002' to 1650'. Base of Pictured Cliffs from 3698' to 3754'. (Reason for 11 hours logging, Water had to send in and get a different truck.)

WELL:

GRAND HCP NO. 1-61/20/62

Finished laying down drill collars, started running 7 5/8" casing at 11:30 a.m. on 1/19/62. Ran 1000' guide shoe and automatic fill-up collar. First centralizer at 1000', second centralizer at 3000', third centralizer at 4000'. 17 joints of 26.40# casing for 1023.09', ran 33 joints of 26.40# casing for 1023.29', ran 61 joints of 26.40# casing for 1050'. Total length of 131 joints, 4033' set at 1000' WB. Float collar at 1050', set with 150 gr. 16% gel and sand at 1000', well to 1000' 1000' 1000'. Drilled plug with 1400# for 10 minutes, released pressure, float held. Good circulation throughout cement job. Plug down at 3:30 p.m. 1/19/62. Ran Welox cement log for cement top, found top at 2450', cut pipe off, nipping up to gas drill.

1/21/62

Finished nipping up, pressure up on pipe and preventor, no leaks. Drilled first collar at 3000', primarily drilling out shoe at 3999'. Lost four hours due to gas line trouble, found stick in line, gas pressure 300#.

1/22/62

Drilling at 4025' with Bit 12. Gas pressure 255#, drilled 825' in 18 1/2 hours. Well dusting good, no show of natural gas, no apparent moisture. Dev. 3/4" at 4200' and 1" at 4750'.

1/23/62

TD 5446'. Bit 12. Drilled 821' of sand and shale. 250# gas pressure. Dev. 1/4" at 5300'. 19 hours drilling time. Small show of gas at 5330', too small to measure. Well dusting good.

1/24/62

Drilling with Bit 13 at 5022'. Drilled 476' in 14 1/4 hours, no show of natural gas. 4 hours trip time, 5 3/4 hours blowing hole, encountered moisture at 5446', well dusting good.

1/25/62

Depth 6900'. Drilled 878' of sand and shale. Gas pressure 225#. Dev. 3/4" at 6100'. 17 3/4 hours drilling time, 4 1/4 hours trip time. Well dusting good.

1/26/62

Depth 7840'. Drilled 940' of sand and shale. Drilling with Bit 15. Dev. 1 1/2" at 7200'. 16 1/2 hours drilling time, 5 hours trip time. No indication of moisture or gas.

WELL:

TRIBAL "C" NO. 1-6

1/27/62

Depth 8015', drilling at rate of 3 minutes per foot. From 7900' to 7989' drilled 3 to 4 minutes per foot, 7990' to 7991' 10 minutes per foot, 7991' to 7993' 8 minutes per foot. Pulled Bit 16 out of hole at 7994' ran Cobra Reed bit. Bit No. 15 EH 2 drilled 690' in 13 3/4 hours. Bit No. 16 EH 4 drilled 96' in 7 hours. No sign of moisture or gas. Drilled 175' in 10 hours.

1/28/62

Electric log TD 8164'. Drilled 135', blew hole 1 1/2 hours, pulled out of hole to log. Ran Gamma Ray Induction & Neutron. From 8164' to 5200' had 48' of rat hole below bottom of Dakota. Finished logging at 11 a.m. Laying down drill pipe to run casing.

1/29/62

TD 8164'. Ran 271 joints 5 1/2" casing set at 8150' KB. Float collar at 8122'. Could not break circulation with gas. Mixed 80 sx. regular cement 4% gel, 1 cu. ft. Strata-crete per sack with 18 bbls. gel water ahead. Could not pump cement around shoe. Left 1120' of cement in side of casing. Top of cement 6410'.

Ran 89 joints 5 1/2" OD 17# casing on bottom	2343.67'
Ran 132 joints 5 1/2" OD 15.5# casing on top	5806.09'
Pipe T.D.	8149.76' KB
Float collar at	8122.00' KB

Well bridged off at 6:30 p.m. 1/28/62, pumped to 1800# on casing. Could not move cement. Got hooked up at 8:30 p.m. 1/28/62 to load back side. Pumped 135 bbls. of water in back side, well on vacume, pumped 60 more bbls. over cap of hole, well on vacume. Total pumped, 195 bbls. (working pipe). Worked pipe from 120,000# to 140,000#, could move pipe approximately 5'. Tried to pump down 5 1/2" casing in process of moving pipe with 2000# pressure. Could not move cement. 10 p.m. 1/28/62, drop bomb to open DV collar. Displaced with 154 bbls. of water, close collar at 10:30 p.m., pressured to 2,000# for 10 minutes. Released pressure. No returns on displacement. Set 15,000# on pipe and set slips. Nippled up, pressured to 1800# with rig pump pressure held.

1/30/62

Ran 2 7/8" tubing with 4 3/4" bit to drill out DV collar. Drilled DV collar at 6025', pressured to 1800#. Held. Found top of cement at 6311'. Cement drilled from 3 to 4 minutes per foot from 6311' to 6620', 309'. 6620' to 6730', 110' drilled from 1 1/2 minutes per foot. Drilled a total of 419' of cement. Found pump down plug at approximately 6410'. Running 3000# on bit. 800# pump pressure 48 RPM. Lack approximately 801' of cement to drill.

1/31/62

Drilled from 6730' to 7300' in cement. Cleaned out to float collar

WELL:

WELL NO. 1-6

1/31/62 Cont'd.

at 8122'. Circulated and cleaned hole, pressured to 1600#, could not pump in. Drilled shoe at 8150', cleaned out to 8164', pumped into formation at 1200# rate of 3/4 bbls. per minute, no returns. Kick pump out, pressure would bleed to 500# immediately. In prep to pull tubing to perforate shoe joint.

2/1/62

Bottom of shoe 8150'. Top of float collar 8122'. Perforated shoe joint at 8139' with 4 squeeze shots. Ran correlation log, pumped in to shoe joint at 1100# 3/4 bbls. per minute. Perforated 2' above float collar at 8120' 4 squeeze holes. Pump in at 1100# 3/4 bbls. per minute. Perforated 4 squeeze holes at 7846'. Pumped in at rate of 10 bbls. per minute at 900#. Kick pump out, pressure would fall to 500# standing pressure. Ran Baker Model "K" CI retainer set at 8116' KB.

2/2/62

Ran 2 7/8" tubing to top of retainer at 4 a.m. Pump lines freezing up. Start trying to pump bridge out at 7:30 a.m. Pump on back side 900#, 8 bbls. per minute. Pump down tubing 2000# rate of 3/4 bbls. per minute. Increase pump pressure to 2300#. Left pressure on for 5 minutes, pressure dropped to 1200#. Pressured back up to 2000#, release pressure immediately. Start pumping back in to 1200#, 4 bbls. per minute. Pressure dropped to 750# pumping pressure, rate of 5 bbls. per minute. Hole started circulating. Dropped back pressure ball, started cement at 9:10 a.m. Well circulating good at rate of 4 bbls. per minute. When cement started around shoe pressure increased from 800# to 1300#. Pumped approximately 25 sx. at this pressure. Pressure gradually building up. Final pressure 1800#. Released pressure, back pressure ball held. Good circulation throughout cementing job. Job completed at 9:35 a.m. Total cement used 50 sx. 3/10 of 1% R-6. Pulled 2000' of 2 7/8" tubing, pressured up on casing 2000# in attempt to cement perforations at 7840'. Could not pump in. Finished pulling 2 7/8" tubing. Rigged up Welen to perforate above stage collar. Tag top of cement at 8057', pressured back up on casing to 2000# to make sure that perforations at 7846' would hold. Left pressure on 10 min. perforations held. Perforated 4 squeeze holes at 6015', 7' above DV tool. When holes were shot well went on vacume. Started pumping. Pumped 27 bbls. of water. Caught fluid, pumped 35 more bbls. Well on vacume. Started cement at 6:30 p.m. pumped 25 bbls. of slurry (100 sx.) 32 bbls. of displacement pumping at 250# pressure. Pressure started increasing. Final pressure on displacement 2000#, job completed at 7:25 p.m. Total cement 100 sacks 3/10 of 1% R-6. Left 3 bbls. of displacement above perforations. Left pressure on well 6 hours. Went in with tubing, tag cement at 5950'. Rams leaking on preventor. Apparently let cement come back. Presently drilling cement at 5400'.

WELL:

MINERAL "C" 11, 1-42/3/62

Drilled cement from 5650' to 5660' thru cement. From 5660' to 6017' (5657') stringy cement. 2' below perforations at 6015' pressured up to 1500# with rig pump, pressure held. Went on to 8057' top of cement, drilled firm cement to 8113'. Ran Bond log over Dakota to Graneros, 8112' to 8036'. Good Bond. 8036' to 8012' some Bond, 8012' to 7912' some cement but no Bond. 7912' to 7895' some cement but poor Bond. 7895' to 7850' some cement no bond. 7850' to 7830 likely some cement but no bond. Finish log at 4 a.m. Rig up Welex.

2/4/62

Perforated 8006'-8110', 24", 4 per foot super dyna-jets.

8042'-8066', 24", 4 per foot super dyna-jets.

Ran tubing spot 1000 gal. 15% acid over perforations. Pressured to 1600# before spotting acid, pressure held. Spotted acid in at 1400# 1 bbls. per minute, broke to 1200# at 2 bbls. per minute (total acid in 2 minutes, 3 bbls.). Well on vacume. Ran Baker full bore packer to 6085', 70' below aquifer perforations at 6015'. Pressured up on back side to 700#, started taking fluid rate of 6 bbls. per minute. Pump through 2 7/8" tubing. Well taking fluid at 1500# 4 bbls. per minute. Released packer, pull up to 5800', pressured up on back side to 2600#, pressure held. Pumped down tubing at 600# rate of 8 bbls. per minute. Pull packer. Set Baker CI bridge plug at 6085'. Ran Baker full bore packer, set at 5817'. Pressured up on back side to 1500#, pumped down tubing at 1200# rate of 8 bbls. per minute. Started cementing at 10:15 a.m. Pumped 75 sx. of cement in tubing, left 4 bbls. of slurry in tubing, started staging cement at 10:25 a.m. Stage cement for 4 hours. Could not obtain any pressure well on vacume. Let well set four hours.

1st Stage: 75 sx. R-6. Finish 1st stage at 2 p.m. Let well set to 6 p.m.

2nd Stage: 50 sx. neat cement at 6 p.m., staging time 2 1/2 hours. Pump in pressure 250# could not maintain pressure. Well on vacume. Let well set 2 hours to 8 p.m.

3rd Stage: 25 sx. neat cement. Started cement at 8 p.m. Pump pressure 750# at 4 bbls. per minute. Shut pump down, well on vacume.

Released full bore packer. Came out of hole. Ran Model "K" retainer set at 5760', 4 a.m. Start to set retainer, pump went out on pump truck.

WELL:

TRENDAH NO. 1-6

2/6/62

Another cement truck on location at 9:30 a.m. 2/5/62. Pressured up on back side to 1500#. Pumped down tubing at rate of 3 BPM at 1200# - started cement at 11 a.m. Pumped 11.5 bbls. of slurry into tubing. Pumped 2 bbls. displacement cement on perfs. Pressure climbed from 1200 to 1300. Started spreading final pressure with 124 sq. in. formation. 3000# standing pressure. Reverse 6 bbls. of slurry (26 sq.) job completed at 12 noon 2/5/62. Pulled 2 7/8" tubing. Put bit on - started drilling cement at 5760' at 3 a.m. WCC 20 hours.

2/7/62

Started drilling retainer at 8 a.m. 2/6/62. Depth of retainer 5760'. Drilled firm cement from 5760' to 6017', 2' below perforations at 6015'. Tag up on plug at 6085'. Circulated 1 1/2 hours, no cement from 6017' to 6085', bridge plug. Pressured up on perfs at 6015' to 3000# for 20 minutes, pressure held. Started drilling on plug at 6085'. Bit running rough, making trip for new bit. Drilled plug at 6085' ran bit on to 8113', less 1' of plug that was pushed down, TD 8113'. Did not touch anything with bit to TD of 8113'. Circulated 2 hours, presently coming out of hole to run packer to test perfs in Greenhorn at 7046'. 11.5 hours drilling cement and retainer, 2 hours circulating, 4 1/2 hours trip for new bit, 1 hour changing rams in preventer, 2 hours drilling plug at 6085', 1 hour preparation and pressure on perfs at 6015'.

2/9/62

After tracing ran gun to check top of sand. Found sand at 7963', 117' below Greenhorn perf (7046') 80' above perf at 8042'. Pressured back up with Western Co. Irac equipment. Pumped in with 1 1/2 pumps at 3400# 12 bbls. per minute. Started in hole at 10:30 a.m. with bit to clean out sand. Well flowing back while running tubing. Hit sand bridge at 7890'. Hit solid sand at 8000'. Started circulating at 2:30 p.m. Circulated until 5 p.m., well clean to PETD 8113'. Well circulated some gas. Pulled tubing and bit, out of hole at 6:30 p.m. Rig up Welox, ran and set 5 1/2" drillable 5 1/2" BP at 8002'. Perforated 4 per foot with Super Dyna jets, 8005' - 8022', 7918' - 7923', 7906' - 7908'. Total 24' 4 per foot. Blender (Western Co.) broke down at 12 midnight. Waiting for blender to be repaired at 8 a.m. 2/9/62.

2/10/62

Blender repaired. Started second stage Irac (Gran. DK) at 9:30 a.m.

ED pressure:	1 Pump 1400#	ED & Fill:	50 bbls.
5 pump on:	2400#	Tracing Fluid:	2585 bbls.
Max. Pressure:	3200#	Flush:	195 bbls.
Max. Treat. Press:	3200#	Over flush:	3 bbls.
Avg. Treat. Press:	2600#	Avg. Inj. rate:	42.4 BPM
Final Treat. Press:	3200#	No. of Balls:	65
10 minute shut-in:	1400#	Avg. sand:	.92 lbs. per gal.
Instant Shut-in:	1800#	Total sand:	100,000 lbs. 20-40

WELL:

WELL NO. 10, 1-62/10/62 Cont'd.

Set Baker top drillable BP at 4196' 10:00 noon. Rigged up Dia-Log. Cut 5 1/2" casing off at 3838' WD. When cut was made well went on vacuums, pulled and laid down 3838' (120 joints) of 5 1/2" 15.5# casing out of hole with 5 1/2" casing at 8:15 p.m. Started in hole with model "K" retainer on tubing at 9:00 p.m. Light plant went out on rig at this time. Light went back on at 12 midnight. Got retainer set at 3:00 a.m. Set at 7:10' NS 2/10/62. Pressured up on back side of retainer to 1000#, pressure hold. Pumped down tubing well on vacuums. Started cement, pumped 150 sx. reg. 1/4# Celco-Flake in tubing, well on vacuums. Dropped bridging ball. Well still on vacuums. Started pumping displacement. Caught cement after pumping 8 bbls. of displacement. Pumped cement in at 600# 3 bbls. per minute. Bumped bridging ball with 2600#. Backed 1/2 bbls. getting displacement in. Ball down at 4:15 a.m. 2/10/62. Released stinger, started out of hole. WCL.

2/11/62

WCL 10 hours. Go back in hole with 6 3/4" tubing (6 3/4" bit). Started drilling cement at 10:30 p.m. Hit good firm cement at 3640'. Cement drilling 2 to 2 1/3 minutes per foot. Presently drilling cement at 3690' with 6 3/4" bit.

2/12/62

Finished drilling cement from 3690' to 3775', from 2 to 3 minutes per foot. Came out of hole with 6 3/4" pipe, rigged up Welex, ran correlation log. Perforated 2 per foot with Super dyna jets; 3702'-3718', 3725'-3734', 3748'-3754'. Finished perforating at 4:30 p.m. Rigged up Western, ready to frac at 5 p.m., finished fracing at 5:42 p.m.

Break down pressure 1 pump 1425#, with 5 pumps on 2200#, maximum pressure 2500#. Max. treating pressure 2500#, average treating pressure 1650#, final treating pressure 2500#. Five minute shut-in 400#, instant shut-in 600#. Break down and fill 4 bbls. treating fluid, 72,240 gal. Flush 177 bbls., over flush with 5 bbls. Overall average injection rate 46.8 BPM. Frac rate 3.4 bbls. per minute. Number of rubber balls used 45. Average sand 1.08# per gal. Total sand pumped into formation 70,600 lbs. of 20-40. After 1 hour shut-in, well had no pressure, well flowing back, went in hole with 6 3/4" bit. Drilled cement from 3775' to 3833' top of liner. Presumably nipping up to go in hole with 6 3/4" bit to blow down and clean top of liner.

2/13/62

Finished nipping up, started blowing down well at 12:30 p.m. 2/12/62. Blowing well down to 1800' with supply gas. Well started unloading water through 7 5/8" casing. Blow well at this point 3 hours, well started cleaning up at this depth, blew on to depth of 3836', 3' below top of liner. Blew well from this depth 9 hours, making estimated 1756 MCFD from Pictured Cliffs perforations, clear of sand, making heavy to light spray of water. Blew well on to 4196', drilled plug at this depth, well started unloading BK frac water. Presently blowing

WELL:

TRIBAL "C" NO. 1-62/13/62 Cont'd.

hole at 6300', well will unload on own. Still making frac water.

2/14/62

Flowing well at 6113', gauge on well 4000 MOPD (1700 MOPD from PC and 2300 MOPD from DK), after flowing 4 1/2 hours making heavy spray of oil and water.

2/15/62

Blow and cleaned well till 9 a.m., water and sand cleaned up. Good show of oil with gas, well still running 4000 MOPD. Started out of hole laying down 2 7/8" tubing. Finished laying down tubing at 6 p.m. 2/14/62. Rigged up Welan. Ran Model "D" production packer set at 7805', 41' above Greenhorn squeeze holes. Presently running 1 1/2" tubing. Well still making same amount of gas.

2/16/62

Ran 241 joints 1 1/2" tubing 2.90# WTG, total 7779.34'. One pup joint 4.50', one pup joint 8.50', total 7952.34' plus 12' KB. Tub landed at 7864.34' with 9000# wt. on packer. On bottom one 1 1/2" X 3' with bull plug in bottom. Two 1 1/2" X 4' part joints, one 1 1/2" X 6" pump out nipple, one locator sub 3.55'. Bottom of tubing at 7822' KB. Tubing landed at 11 a.m. 2/15/62. Ran 113 joints 1" IS 1.315# V-50 total tubing 3672.30'. Ran 2 1" X 2.10' total 4.20' jet collars, first collar at 3202', second collar at 2924.50'. First jet collar 506' above top perf (3702'), second jet collar 723' above top perf. Landed at 9:30 p.m. 2/15. SHPC at 12:00 midnight. Rig released 11 p.m. 2/15. After landing 1 1/2" X 1" tubing tried to pump out plug, pump past plug rate of 1 bbl. per minute at 1200#, could not pump plug out. Rig up B & R with wire line, first spud with tools, plug knocked out. DK started flowing at 7 a.m. 2/16. DK making heavy load of oil water and gas. After 7 hours shut-in on PC tubing and casing pressure 750#.

2/17/62

Flow DK to 12 noon. Still making quite a bit of oil and water. Shut well in, will run a test tomorrow. PC shut-in 14 hours, casing and tubing pressure 850#, will run a test today.

2/18/62

Test PC thru 1" tubing. SHCP 692#, SHCP 692#. Final casing pressure end of 3 hour test 75#, final tubing pressure 71, temp. 36°, no fluid of any kind. DK shut-in tubing pressure 2307#, 24 hours. Final tubing pressure 41#, 50° temp. Heavy spray of oil throughout 3 hour test, slight show of water.

2/19/62

Shut-in.

WELL:

TRIBAL NO. 1-6

2/20/62

Shut-in. Dulcy road closed to heavy traffic.

3/7/62

After 40 hours well making 504 MOFD, 1 bbl. oil per hour and 1/4 bbls. water per hour. Total oil for 40 hours, 50.31 bbls. all with 300# back pressure on well.

3/8/62

Corrected gravity 55.5, will mail test data sheet today. Ran pressure bomb in hole at 4:20 p.m. Bomb has 72 hour clock, will flow 24 hours then shut-in for 48 hour build up, will call later today with oil production for last night.

3/9/62

Well produced 37 bbls. oil in 32 hours, very little water, 504 MOFD. Shut well in 4 p.m. 3/8/62 for 48 hour bottom hole pressure build up. Well was producing against 210 back pressure.

3/10/62

Shut-in for bottom hole pressure build up.

3/11/62

Attempted to pull pressure bomb, could not pull. Pulled line in two, shut well in.

3/12/62

Will attempt to fish pressure bomb out of hole today.

3/13/62

Attempted to fish bomb, could not catch wire line because of ice, will try again today using mechanical. Fishing tool went to 61'.

OPEN FLOW TEST DATA

DATE March 3, 1962

Operator Consolidated Oil & Gas, Inc.		Lease Section 36, T4N, R10W, S10E	
Location T4N, R10W, S10E, Sec. 36, T4N, R10W, S10E		County Hidalgo	State Texas
Formation Glen Rose		Permit 10000	
Casing Diameter 10 1/2	Surf Amt Feet 1110	Tubing Diameter 2 3/8	Surf Amt Feet 700
Pay Zone From 700	To 800	Total Depth 1500	
Stratigraphic Interval Glen Rose		Flow Through Casing	Flow Through Tubing

Choke Size, Inches 10		Choke Constant C 14.360	
Shut-In Pressure, Casing 100	PSIG + 12 = PSIA	Days Shut-In 5	Shut-In Pressure, Tubing 100
Flowing Pressure, P 10	PSIG + 12 = PSIA		Flowing Pressure, Pw 10
Temperature T 80	°F		Flow (From Tubing) 80
			Gravity .70

$$\text{CHOKER VOLUME} = Q = C \times P_i \times F_i \times F_g \times F_{pv}$$

$$Q = 14.360 \times 10 \times 1.0000 \times 1.0000 = 726 \text{ MCF/D}$$

$$\text{OPEN FLOW} = Aof = Q \left(\frac{P_i^2}{P_e^2 - P_w^2} \right)^{1/2}$$

$$Aof = \left(\frac{P_i^2}{P_e^2 - P_w^2} \right)^{1/2} =$$

$$Aof = \text{MCF/D}$$

TESTED BY Glenn Phillips

WITNESSED BY _____

[Signature]

OPEN FLOW TEST DATA

Well file

DATE February 23, 1962

Operator Conoco/Phillips Oil & Gas, Inc.		Lease Barnett, LeFlore Co., 3-6	
Location 7.1' 1/2" E 1190' W/4th, Sec. 6-22-21-22		County LeFlore	State New Mexico
Formation Barnett Shale		Permit 100000	
Casing: Diameter 8.5" ID	Set At: Feet 9150	Tubing: Diameter 2 3/8"	Set At: Feet 9175
Pay Zone: From 3712	To 3750	Total Depth 7030' Depth	
Stratigraphic Markers Barnett Shale		Flow Through Casing N	Flow Through Tubing N

Choke Size, Inches 0.750		Choke Coefficient: C 14.1505			
Shut-In Pressure, Casing, PSIG 204	+ 12 = PSIA 216	Days Shut-In 7	Shut-In Pressure, Tubing, PSIG 204	+ 12 = PSIA 216	
Flowing Pressure: P, PSIG 200	+ 12 = PSIA 212	Working Pressure: P _w , PSIG 210	+ 12 = PSIA 222		
Temperature: T, °F 60	n = .75	Fpv (From Tables) 1.050	Gravity 5.00		

$$\text{CHOKE VOLUME} = Q = C \times P_r \times F_t \times F_c \times F_{pv}$$

$$Q = 14.1505 \times 221 \times 1.0190 \times 0.9800 \times 1.0000 = 3240 \text{ MCF/D}$$

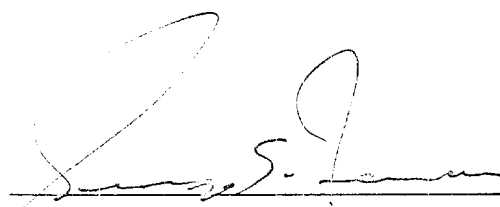
$$\text{OPEN FLOW} = Aof = Q \left(\frac{P_c^2}{P_c^2 - P_w^2} \right)^n$$

$$Aof = \left(\frac{10000}{750000} \right)^n = 3100$$

$$Aof = 3100 \text{ MCF/D}$$

TESTED BY: Clayton Phillips

WITNESSED BY: _____



(SUBMIT IN TRIPLICATE)

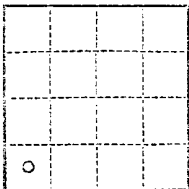
Indian Agency Jicarilla

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Apache

Allottee Socony Mobil Oil Co.

Lease No. Contract 97



SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF WATER SHUT-OFF	X
NOTICE OF INTENTION TO CHANGE PLANS	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF	SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO REDRILL OR REPAIR WELL	SUBSEQUENT REPORT OF REDRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE	SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING	SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

March 16, 1962

Tribal "C"
Well No. 1-6 is located 790 ft. from N line and 1190 ft. from W line of sec. 6

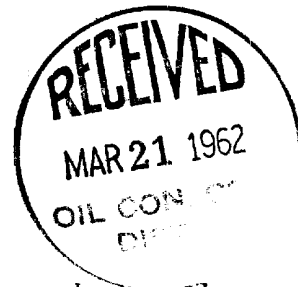
SW 6 26N 3W NMPM
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)
Basin Dakota Rio Arriba New Mexico
Tapicito Fractured Cliffs (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 6960 ft. KB

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Drilled 9 7/8" hole to 4000'. Ran 7 5/8" 26.40# and 24# J-55 casing to 3999', cemented with 150 sx. 16% gel cement followed by 200 sx. 4% gel cement. Bumped plug 3:30 p.m., 1/19/62, held 1400 PSI 10 minutes - OK.



I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Consolidated Oil & Gas, Inc.

Address 2112 Tower Building

1700 Broadway

Denver 2, Colorado

By [Signature]

Title Chief Engineer