API #	Well Name
037 - 16938	South Torrance Unit AC-21

Task	Date	Initial	no. of pgs. / logs	Notes
Prepped Data file	3/27/15	JN	45/6	
Scanned Data file	3/27/15	JN		
QC/ [✓ Upload] / Verify	4/3/15	mac	45	
Scanned Log/s	3/27/15	JN	TIFS 1 PDFS 6	
QC/ [✓ Upload] / Verify	4/3/15	mac	1/6	
Update Scanning	Date	Initial	no. of pgs. / logs	Notes
Scanned Data file				
QC/ Upload / Verify				
Scanned Log/s			TIFS PDFS	
QC/ Upload / Verify				
Update Scanning	Date	Initial	no. of pgs. / logs	Notes
Scanned Data file				
QC/ Upload / Verify				
Scanned Log/s			TIFS PDFS	
QC/ Upload / Verify				
Update Scanning	Date	Initial	no. of pgs. / logs	Notes
Scanned Data file				
QC/ Upload / Verify				
Scanned Log/s			TIFS PDFS	
QC/ Upload / Verify				
Update Scanning	Date	Initial	no. of pgs. / logs	Notes
Scanned Data file				
QC/ Upload / Verify				
Scanned Log/s			TIFS PDFS	
QC/ Upload / Verify				
Update Scanning	Date	Initial	no. of pgs. / logs	Notes
Scanned Data file				
QC/ Upload / Verify				
Scanned Log/s			TIFS PDFS	
QC/ Upload / Verify				

NATURAL RESOURCES AGENCY OF CALIFORNIA

DEPARTMENT OF CONSERVATION

DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES

5816 Corporate Ave., Suite 100, Cypress, CA 90630-4731 Phone:(714) 816-6847

NOTICE OF RECORDS DUE

Cypress, California
7/23/2015

Mr. Rey Javier
Brea Canon Oil Co. (B6100)
23903 S. Normandie Ave.
Harbor City, CA 90710

In accordance with Division 3 of the California Public Resources Code, the following records are due (covering the reworking notice dated 9/9/2010) for your well "South Torrance Unit" AC-21 (037-16938).

Torrance Field, Los Angeles County, Sec. 30, T. 04S, R. 13W, SB B.&M.

Records, in duplicate are due within 60 days after completion of any well work or tests. Failure to provide such records may result in enforcement action, including issuance of violations, civil penalties and orders of the supervisor, pursuant to PRC 3236.5.

- [ ] Well Summary (Form OG 100)
- [ ] History (Form OG 103, OGG 103)
- [ ] Core of sidewall sample (Form OG 101, OGG 101)
- [ ] Directional survey
- [ ] Other
- [ ] All Logs
- [ ] Dipmeter (computed)
- [ ] Oil and/or gas analysis
- [ ] Water analysis
- [ ] Pressure measurements (flowing or static)
- [ ] Velocity Survey
- [ ] Temperature Survey
- [ ] Spinner survey
- [ ] Standard Annular Pressure Test
- [x] RA Tracer survey (fluid migration test)

RA surveys were conducted on 3/20/2013 and 3/18/2015. Please send the results from those two surveys.

REPORTS FOR THE MONTH OF *: Production, oil and gas disposition, and injection reports are due on or before the 30th day of each month for the preceding calendar month. Division forms must be signed in the spaces provided.*

OIL AND GAS OPERATION

- [ ] Production and disposition reports (Form OG 110 or computer report)
- [ ] Injection reports (Form OG 110B or computer report)

GEOTHERMAL OPERATION

- [ ] Production reports (Form OGG 110)
- [ ] Injection reports (Form OGG 110B)

EXPIRED
CANCELLED
MAILED
EMAILED 7.23.15 TL

Name: Michael Okafor	Title: Associate Oil and Gas Engineer	Signature: Michael N. Okafor

OG170 (03/01/2012)

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DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CHECK LIST – RECORDS RECEIVED AND WELL STATUS

Company:	**Brea Canon Oil Co.**	Well: **" South Torrance Unit" AC-21**
API#:	**037-16938**	Sec. **30**, T. **4S**, R.**13W**. S. B. B. & M.
County:	**Los Angeles**	Field: **Torrance**

RECORDS RECEIVED	DATE
Well Summary (Form OG100)	
History (Form OG103)	**11/23/2010 (2)**
Core Record (Form OG101)	
Directional Survey	
Sidewall Samples	
Date final records received.	
Electric Logs:	
Other:	

STATUS			
~~Producing~~ ACTIVE	☑	Drilling	☐
Abandoned	☐	Idle	☐
Reabandoned	☐	Other	☐

WELL TYPE			
Oil	☐	Waterflood	☑
Gas	☐	Water Disposal	☐
Water Source	☐	Cyclic Steam	☐
Observation	☐	Steam Flood	☐
Exploratory	☐	Fire Flood	☐
Dry Hole	☐	Other	☐

EFFECTIVE DATE: 9/20/2010

REMARKS: CTI

	ENGINEERS CHECK LIST	CLERICAL CHECK LIST
☑	Summary, History & Core Record (Dupl.)	Location change
☐	Electric Log	Elevation change
☑	Operator's Name	Form OGD121
☑	Signature	Form OGD150b (Release of Bond)
☑	Well Designation	Duplicate logs to archives
☐	Location	Notice of Records Due
☐	Elevation	EDP 2-17-11 VM
☐	Notices	District Date Base
☑	"T" Reports	Final Letter (OG159)
☐	Casing Record	Update Center 2-17-11 VM
☐	Plugs	
☐	Directional Survey	
☑	Production/Injection (FAP Codes: 782 06 20)	
☐	E Well on Prod., enter EDP	**FIELD CHECK LIST**
☐	Surface Inspection Required	Date Surface Inspection Completed:
☐	Surface inspection Waived (Island)	Other:
☐	Well site restoration deferred (common cellar)	
☐	Final Letter Required AB: ☐ REAB: ☐	
☐	Other:	

RECORDS NOT APPROVED	RECORDS APPROVED 2/7/2011 GB
(Reason:)	*(Signature)*
	RELEASE BOND
	Date Eligible
	(Use date last needed records received.)
	MAP AND MAP BOOK N/C

OGD2 5/16/01 CYPRESS

45

F

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

HISTORY OF OIL OR GAS WELL

Operator	Brea Canon Oil Co, Inc.	Field	Torrance		County	Los Angeles	
Well	South Torrance Unit AC-21	, Sec	30	, T 4S	, R 13W	, SB	B.&M.
A.P.I. No.	037-16938	Name	Rey Javier (Person submitting report)		Title	Vice President (President, Secretary or Agent)	
Date	11/23/10						

Signature Rey Javier

23903 S. Normandie Ave, Harbor City, CA 90710 (Address)

(310) 326-4002 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date 2010	Acid Stim
9/13	Moved in Rig and Equipment and rigged up. Removed surface equipment and Installed Class II BOPE and working floor. Found BOPE leaking internally when function testing and not able to get a proper seal. Removed working floor and swapped out BOPE for a new one. Pressure tested 8-5/8" csg. with 500 psi and held for 15 min. Bled off pressure and well still flowing at a good rate through tbg from the formation. Secured well.
9/14	Released and pulled Weatherford 8-5/8" Lok Set Packer. Ran 1-1/2" Sinker Bar on the sandline and got pickup @ 3740' - 3786 is ED. Ran original 2-7/8" injection tbg with 783' tail of 2-3/8" tbg and 3.063" O.D. sawtooth collar on bottom, tagged fill @ 3768'. Rigged for and established circulation,changed well over to lease water and cleaned out sand & scale from 3768' to 3786' E.D., having to rotate tbg. at times. Circulated hole clean, pulled tbg out of hole and started back in hole with tbg and Weatherford 5-3/4" positive scraper set @ 1/4" under drift. Secured well. Note: Recovered 100 bbls of oil from well flowing & being changed over.
9/15	Continued running in hole with Weatherford 5-3/4" Scraper set @ 1/4" under drift (4.615" O.D.). Scraper stopped @ known bad spot in 5-3/4" liner @ 3172'. Set 4K # tbg weight on Scraper and it took 30K # over tbg string weight to pull out of bad spot. Bucks tested 2-7/8" tbg out of hole @ 5K psi - no leaks - all tbg tested good, laid down Scraper. Ran in hole w/ Weatherford 5-3/4" Wire Brush to 3786' ED. Brushed perforations from 3750' to 3430' with 3' strokes making 5 passes plus perfs @ 3365' to 3305' with 2 passes and perfs @ 3260' to 3250' with 3 passes. pulled tbg above TOL and secured well.
9/16	Lowered tbg and wire bush and tagged at 3786' ED. With wire brush at 3770' MTS spotted 300 gal each of 15% HCl, 12/3 HCl/HF and 2% ammonium chloride water down tbg. Brushed perforations in 5-3/4" liner with 15% HCl Acid from 3770' to 3430' with 3' strokes making 5 passes. Pumped 15 bbls of clean injection water down csg with tbg closed @ 1 bpm w/ 500 psi. Let pressure bleed to formation. Bled to 60 psi in 1 hr, bled pressure off well to mud pump and recovered 1 bbl of water. MTS completed pumping ammonium chloride water down tbg and well stopped flowing back but csg stood full. With tbg @ 3770', repeated wire brushing procedure of perforations with 12/3 HCl/HF Acid and displacing with clean injection water per program with tbg depths @ 3430' and 3786'. With tbg @ 3000', pumped 10 bbls of clean injection water down tbg. and put well on injection down csg @ 600 bpd rate with 110 psi.
9/20	Pressure bled off to formation but well has a slight flowback. Pulled tbg and wirebrush laying down all 2-3/8" tbg. Ran in hole with original tested 2-7/8" tbg with 8-5/8" redressed Lok Set Packer with 2-Jt tail and bell collar on bottom. Removed BOP and landed flange with packer @ 3084' and bell collar @ 3147'. Installed surface equipment, dumped 25 gal of packer fluid down csg and pressure tested 8-5/8" csg from 3084' to surface with 360 psi and held solid for 30 min. DOG waived witnessing test per W. Chen, so charted test for them. BCO Operator returned well to injection @ 250 bpd rate, cleaned location and moved rig and equipment out.
9/22	500 BWIPD at 480 psi.
9/25	794 BWIPD at 800 psi.

OG103 (8/93/GSR1/5M)

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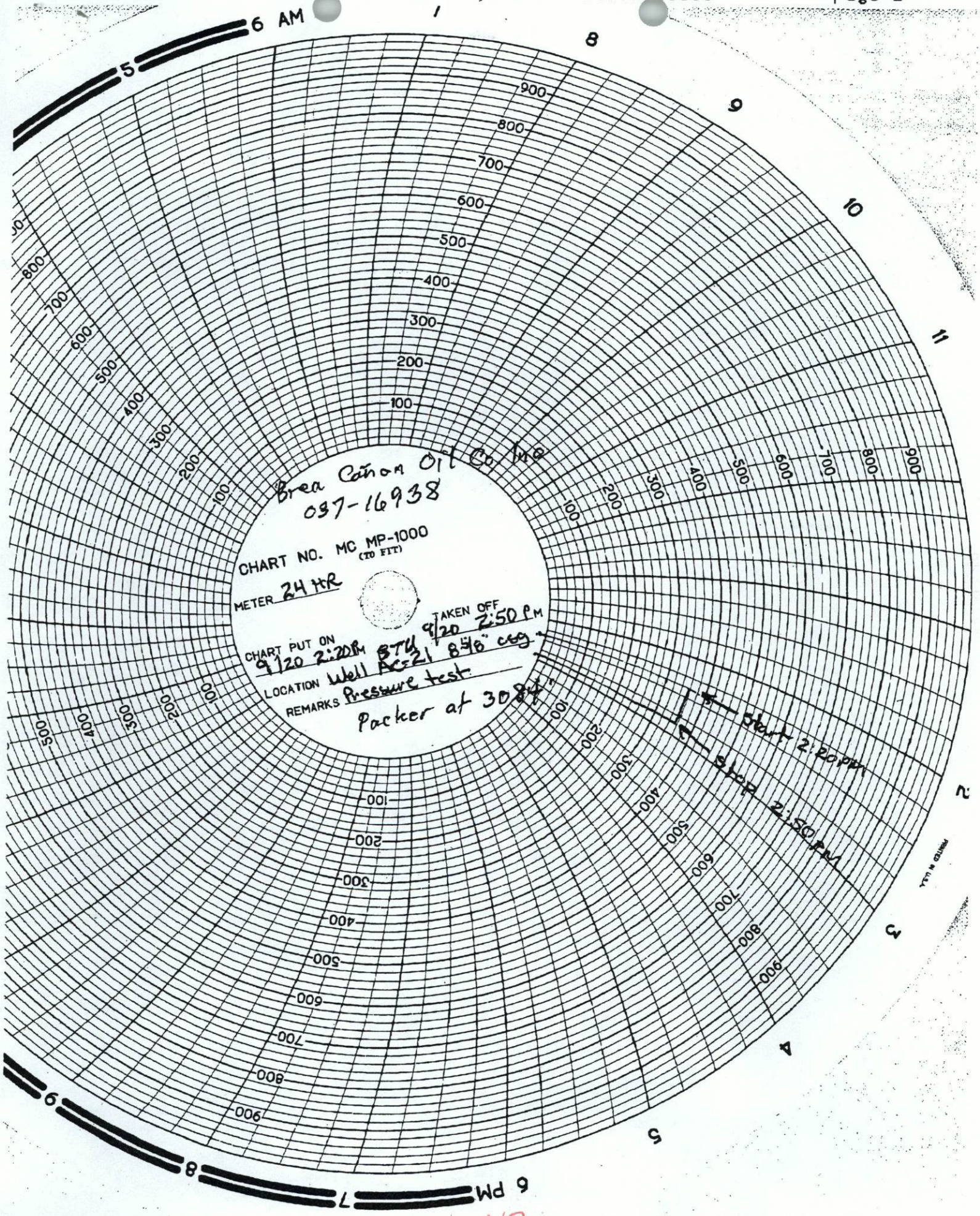
6 AM
6 PM
Brea Canon Oil Co. Inc
037-16938
CHART NO. MC MP-1000
(TO FIT)
METER 24 HR
CHART PUT ON 9/20 2:20PM
TAKEN OFF 9/20 2:50 PM
LOCATION Well AC-21 8 5/8" csg.
REMARKS Pressure test
Packer at 3084'
Start 2:20PM
Stop 2:50 PM

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

HISTORY OF OIL OR GAS WELL

Operator	Brea Canon Oil Co, Inc.	Field	Torrance	County	Los Angeles
Well	South Torrance Unit AC-21	, Sec 30	, T 4S	, R 13W	, SB B.&M.
A.P.I. No.	037-16938	Name	Rey Javier (Person submitting report)	Title	Vice President (President, Secretary or Agent)
Date	11/23/10				

Signature Rey Javier

23903 S. Normandie Ave, Harbor City, CA 90710 (Address)

(310) 326-4002 (Telephone Number)

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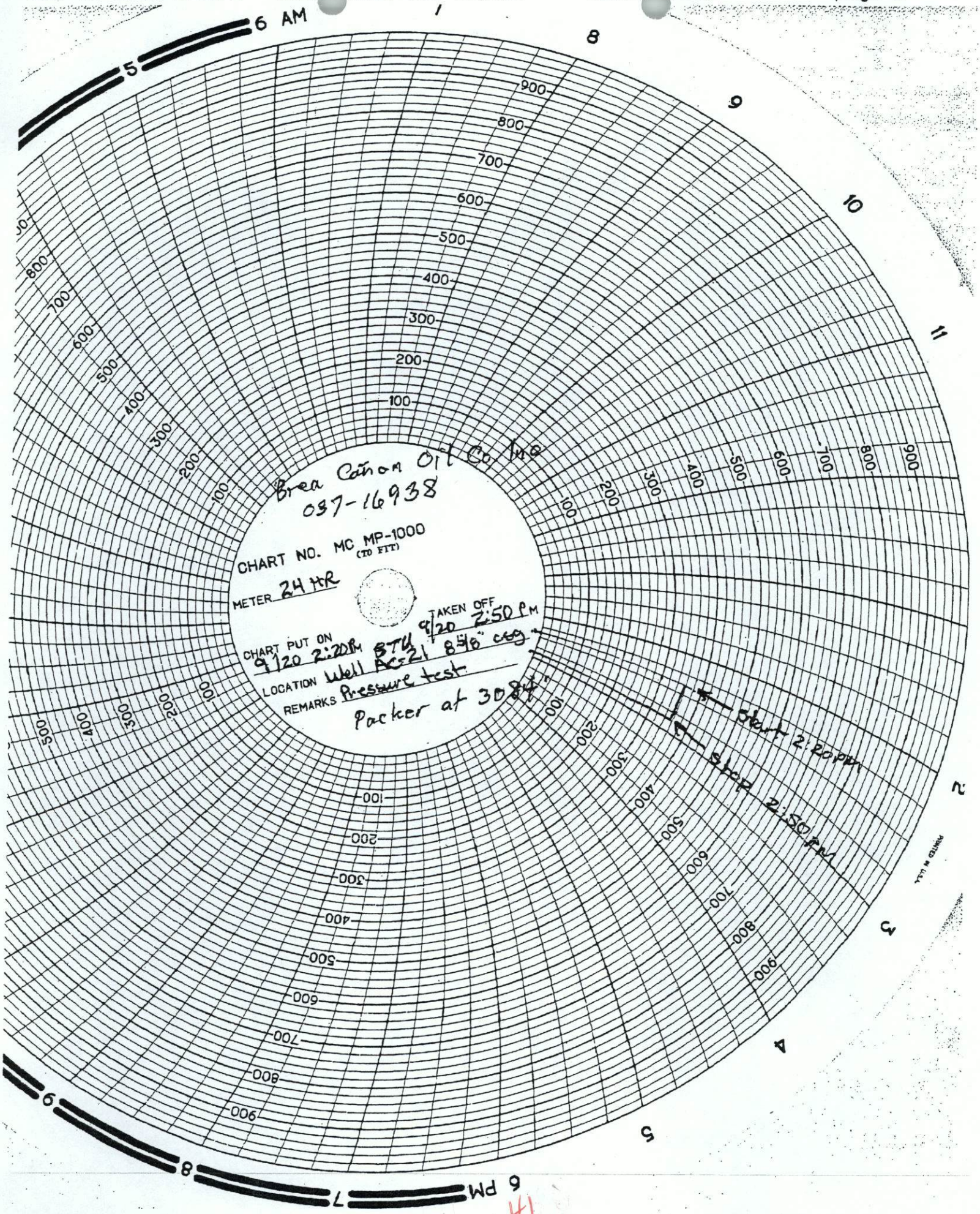
9/20	Pressure bled off to formation but well has a slight flowback. Pulled tbg and wirebrush laying down all 2-3/8" tbg. Ran in hole with original tested 2-7/8" tbg with 8-5/8" redressed Lok Set Packer with 2-Jt tail and bell collar on bottom. Removed BOP and landed flange with packer @ 3084' and bell collar @ 3147'. Installed surface equipment, dumped 25 gal of packer fluid down csg and pressure tested 8-5/8" csg from 3084' to surface with 360 psi and held solid for 30 min. DOG waived witnessing test per W. Chen, so charted test for them. BCO Operator returned well to injection @ 250 bpd rate, cleaned location and moved rig and equipment out.
9/22	500 BWIPD at 480 psi.
9/25	794 BWIPD at 800 psi.

OG103 (8/93/GSR1/5M)


6 AM
6 PM
Brea Canon Oil Co Inc
037-16938
CHART NO. MC MP-1000 (TO FIT)
METER 24 HR
CHART PUT ON 9/20 2:20PM
TAKEN OFF 9/20 2:50 PM
LOCATION Well AC-21 8 5/8" csg.
REMARKS Pressure test
Packer at 3084'
Start 2:20PM
Stop 2:50PM

41

✓ GB

NATURAL RESOURCES AGENCY
DEPARTMENT OF CONSERVATION

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

No. T 110- 0543

REPORT ON OPERATIONS

WATERFLOOD PROJECT

Cypress, California
February 8, 2011

Rey Javier, Agent
BREA CANON OIL CO.
23903 S. Normandie Avenue
Harbor City, CA 90710

Your operations at well **"South Torrance Unit" AC- 21,** A.P.I. No. **037-16938**, Section **30,** T. **4**S, R. **13**W, S.B. B & M., **Torrance** Field, **Los Angeles** County, were witnessed on **10/28/2010**. **W. Chen,** representative of the supervisor, was present from **1215** to **1230** There was also present **Gary Adams, Brandon Cesenas, Production Data, Inc.**

The operations were performed for the purpose of demonstrating that all of the injection fluid is confined to the formations below 3166'.

DECISION: APPROVAL

DEFICIENCIES NOTED AND CORRECTED: **None**

CONTRACTOR: **PDI**

Elena M. Miller
State Oil and Gas Supervisor

By: Kenneth Carlson
For: M. Ali Khan, *Acting District Deputy*

GB:dj

cc: Update

OG109 01-06-09

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State of California
Department of Conservation
Division of Oil, Gas, and Geothermal Resources

No. T10-0543

MECHANICAL INTEGRITY TEST (MIT)

Operator: Brea Cañon Oil Co.					Well: "South Torrance Unit" AC-21
Sec. 30	T. 4S	R. 13W	B.&M. S.B.	API No.: 037-16938	Field: Torrance
County: Los Angeles					Witnessed/Reviewed on: 10-28-2010

W. Chen ,representative of the supervisor, was present from 1215 to 1230 .

Also present were: Gary Adams & Brendan Cesenas, Production Data, Inc.

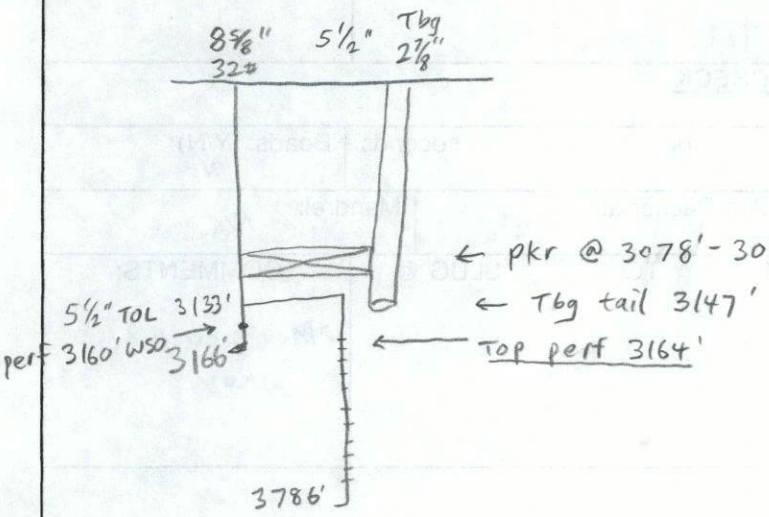
Casing record of the well:

13 3/8" cem 41' ; 8 5/8" cem 3166' WSO, perf 3160' wso ; 5 3/4" ld 3133' - 3786', perfs @ int 3165' - 3786'. TD 3787'

The MIT was performed for the purpose of (P) 3166 '

☑ The MIT is approved since it indicates that all of the injection fluid is confined to the formations below 3166 feet at this time.

☐ The MIT is not approved due to the following reasons: (specify)



CONTRACTOR: Production Data, Inc.

UNCORRECTABLE DEFICIENCIES:

N/A

DEFICIENCIES NOTED AND TO BE CORRECTED:

N/A

DEFICIENCIES CORRECTED:

N/A

Well: "South Torrance Unit" AC - 21	Date: 10-28-2010	Time: 1215 - 1230
Observed rate: 500 B/D	Meter rate: 500 B/D	Fluid level: Ø feet
Injection pressure: 900 psi	MASP: —	Pick-up depth: 3784' feet
Initial annulus pressure: Ø psi	Pressure after bleed-off: Ø psi	
Casing vented during test (Y/N) Y	Survey company: Production Data, Inc. (PDI)	

conf. MP 3166'

SPINNER COUNTS

DEPTH	COUNTS	RATE	DEPTH	COUNTS	RATE	COMMENTS:

TRACER CASING AND TUBING RATE CHECKS

Background log: 3000' to 3250'

Interval	Time (sec.)	Rate (B/D)
3334'-3340'	68	175
3263'-3270'	55	255
3100'-3125'	25	500
3193'-3203'	56	360
100'-125'	60	—

COMMENTS:

TOP PERFORATION CHECK

Top perforation depth: 3164'	Wait at: 3100' for 60 seconds	Beads: (Y/N) N
Casing shoe at: 8 5/8" @ 3166'	WSO holes at: 3160'	Arrival time: *Calculated* — *Actual* —

	LOG FROM	TO	SLUG @	LOG FROM	TO	SLUG @	COMMENTS:
↓	3100'	3125'	3100'				> Moving below 3166' okay.
↓	3125'	3225'	3175' (14 sec)				
↑	3225'	3000'	3195' (19 sec)				

same run

PACKER CHECK

Packer at: 3078'-3084'	Wait at: 3100' for 60 seconds	Beads: (Y/N) N
Tubing tail at: 3147'	Tubing size: 2 7/8"	2nd Packer at: N/A — Mandrel: N/A

	LOG FROM	TO	SLUG @	LOG FROM	TO	SLUG @	COMMENTS:
↓	3100'	3125'	3100'				> Moving below 3166' okay.
↓	3125'	3225'	3175' (14 sec)				
↑	3225'	3000'	3195' (19 sec)				

COMMENTS:

- Reviewed only, okay

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
5816 Corporate Ave., Suite 200 Cypress, CA 90630-4731
Phone:(714) 816-6847 Fax:(714) 816-6853

No. T **112-0302**

REPORT ON OPERATIONS

WATER FLOOD PROJECT
TAR, RANGER & MAIN ZONES, SOUTH

Mr. Rey Javier
Brea Canon Oil Co. (B6100)
23903 S. Normandie Ave.
Harbor City, CA 90710

Cypress, California
May 21, 2012

Your operations at well **"South Torrance Unit" AC-21**, A.P.I. No. **037-16938**, Sec. **30**, T. **04S**, R. **13W**, **SB** B.&M., **Torrance** field, in **Los Angeles** County, were witnessed on **9/16/2010**, by **N. Heda**, a representative of the supervisor.

The operations were performed for the purpose of **inspecting the blowout prevention equipment and installation**.

DECISION: **APPROVED**

DEFICIENCIES NOTED AND CORRECTED: None

GB/dj

Tim Kustic
State Oil and Gas Supervisor

By Martin Wells
for Daniel J. Dudak, *Acting District Deputy*

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OG109 (Rev. 10/2011)

API No. 037-16938 DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES T ✓KMA 5/16/12

BLOWOUT PREVENTION EQUIPMENT MEMO

112-0302

Operator Brea Canon Oil Co. Well "South Torrance Unit" AC-21 Sec. 30 T. 4S R. 13W
Field Torrance County Los Angeles Spud Date

VISITS:	Date	Engineer	Time	Operator's Rep.	Title
1st	9/16/2010	N. Heda	(1110 to 1125)	Rick VanHooser	rig supervisor
2nd			(to)		

Contractor Oil Well Service Rig # 32 Contractor's Rep. & Title

Casing record of well:

OPERATION: Testing (inspecting) the blowout prevention equipment and installation. Critical well? Y ☒ N ☐

DECISION: The blowout prevention equipment and its installation on the _____ " casing are approved.

Proposed Well Opns: rework . MACP: _____ psi **REQUIRED BOPE CLASS:**

Hole size: _____ " fr. _____ ' to _____ ', _____ " to _____ ' & _____ " to _____ '

CASING RECORD OF BOPE ANCHOR STRING					Cement Details	Top of Cement	
Size	Weight(s)	Grade(s)	Shoe at	CP at		Casing	Annulus

BOP STACK							TEST DATA						
API Symb.	Ram Size (in.)	Manufacturer	Model or Type	Vert. Bore Size (in.)	Press. Rtg.	Date Last Overhaul	Gal. to Close	Recov. Time (Min.)	Calc. GPM Output	psi Drop to Close	Secs. to Close	Test Date	Test Press.
RD	2-7/8	Townsend	81	9	3M		.75						
RD	cso	Townsend	81	9	3M		.75						

ACTUATING SYSTEM

Accumulator Unit(s) Working Pressure _____ psi
Total Rated Pump Output _____ gpm Fluid Level
Distance from Well Bore 25 ft. x

	Accum. Manufacturer	Capacity	Precharge
1		gal.	psi
2		gal.	psi

CONTROL STATIONS	Elec.	Hyd.	Pneu.
Manifold at accumulator unit			
Remote at Driller's station			
Other: handpump		x	

EMERG. BACKUP SYSTEM				Press.	Wkg.Fluid
1	N_2 Cylinders	1	L= 51 "	2450	7.7 gal.
	Other:	2	L= "		gal.
		3	L= "		gal.
		4	L= "		gal.
		5	L= "		gal.
		6	L= "		gal.
			TOTAL: 7.7		gal.

HOLE FLUID MONITORING EQUIPMENT	Alarm Type Audible	Visual	Class
Calibrated Mud Pit			A
Pit Level Indicator			B
Pump Stroke Counter			
Pit Level Recorder			
Flow Sensor			C
Mud Totalizer			
Calibrated Trip Tank			
Other:			

TOTAL: 1.5

AUXILIARY EQUIPMENT

		No.	Size (in.)	Rated Press	Connections Weld	Flange	Thread	Test Press.
	Fill-up Line							
x	Kill Line		2	3M			x	
x	Control Valve(s)	3		3M			x	
	Check Valve(s)							
	Aux. Pump Cnnct.							
	Choke Line							
	Control Valve(s)							
	Pressure Gauge							
	Adjstble Choke(s)							
	Bleed Line							
	Upper Kelly Cock							
	Lower Kelly Cock							
	Standpipe Valve							
	Stndpipe Pres. Gau.							
x	Pipe Safety Valve		2-7/8	3M				
	Internal Preventer							

Hole Fluid Type	Weight	Storage Pits (Type & Size)
Lease water		180 bbl

REMARKS AND DEFICIENCIES:

OGD9 (9/06)

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CONTRACTOR:

Oil Well Service

UNCORRECTABLE DEFICIENCIES:

DEFICIENCIES NOTED AND TO BE CORRECTED:

n/a

DEFICIENCIES NOTED AND CORRECTED:

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

No. P 110-0572

782 (Field Code)

06 (Area Code)

20 (New Pool Code)

20 (Old Pool Code)

PERMIT TO CONDUCT WELL OPERATIONS

WATERFLOOD PROJECT

Rey Javier, Agent
BREA CANON OIL CO.
23903 S. Normandie Avenue
Harbor City, CA 90710

Cypress, California
September 9, 2010

Your proposal to **rework (acid stimulation and reset packer)** well **"South Torranc Unit" AC-21**, A.P.I. No. **037-16938**, Section **30**, T. **4S**, R. **13W**, **S.B.** B. & M., **Torrance** Field, **Onshore** area, **Tar, Ranger and South Main** pool, **Los Angeles** County, dated **8/31/2010**, received **8/31/2010** has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment with hydraulic controls, equivalent to this Division's Class **II2M** requirements, or better, shall be installed and maintained in operating condition.
2. Well killing fluid of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts shall be used.
3. All fluid injection shall be done through tubing with packer set in cemented casing immediately above the intended zone of injection.
4. Prior to any sustained injection above of **0.90** psi per foot of depth as measured at the sand face, step-rate and profile tests shall be made. The results of these tests and the proposed method of operations as to input rate, pressure and water distribution by subzones shall be submitted to this Division for approval.
5. Within three months after injection is started and every two years thereafter, this Division shall be furnished with sufficient data to confirm the confinement of the injected fluid to the intended zone of injection and to demonstrate the mechanical integrity of the **8 5/8"** casing, injection tubing and packer.
6. This Division shall be consulted and a Supplementary Notice may be required before making any changes in the proposed program.
7. **THIS DIVISION SHALL BE NOTIFIED TO:**
   - a. Inspect the installed blowout prevention equipment prior to commencing downhole operations.
   - b. Witness a pressure test of the **8 5/8"** casing prior to injection.
   - c. Witness the running of an injection survey.

NOTE:

1. A crew drill may be required at the time of the blowout prevention equipment inspection.
2. This well shall conform to the provisions set forth in our letter dated **February 12, 1986** approving the project.
3. Hydrogen sulfide gas is known to be present in this area, adequate safety precautions shall be taken prior to commencing operations.

GPB:gpb

cc: Update
EDP

Project Code: M12
BLANKET BOND

Engineer: Grace P. Brandt

Phone: 714/816-6847

Elena M. Miller
State Oil and Gas Supervisor

By Kenneth M. Carlson
For Kenneth M. Carlson, *Acting District Deputy*

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended. Issuance of this permit does not affect the Operator's responsibility to comply with other applicable state, federal and local laws, regulations and ordinances.

OG 111

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P# 110-0572 S/GB

NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

FOR DIVISION USE ONLY			
	Forms		
Bond	OGD114	OGD121	
	9-11-10 KJ	9-7-10 KJ	

NOTICE OF INTENTION TO REWORK / REDRILL WELL

Detailed instructions can be found at: www.conservation.ca.gov/dog/

M12
782-06-20
onshore
Tar-Ranger & South Main
Revised 12/12/86

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework ☒ / redrill ☐ (Check one) well South Torrance Unit AC-21, API No. 037-16938

Sec. 30, T. 4S, R. 13W, S.B. B.&M., Torrance Field, Los Angeles County.

The complete casing record of the well (present hole), including plugs and perforations, is as follows: (Attach wellbore schematics diagram also.)

14" cmtd at 41'.
8-5/8" 36# C-45 cmtd at 3166' (TTOC 743'). Top cmt job 80'-surface. WSO 3160'.
5-3/4" 22.5# C-45 liner 3133'-3786', prepacked to 7" O.D. with 6-8 gravel.
Perfs: 0.080" (16-6-2) 3165'-3363' and 3433'-3786'.
Plugs: None

The total depth is: 3787 feet. The effective depth is: 3786 feet.

Present completion zone(s): Tar, Ranger, Main (Name). Anticipated completion zone(s): Tar, Ranger, Main (Name).

Present zone pressure: ~1100 psi. Anticipated/existing new zone pressure: ~1100 psi.

Is this a critical well as defined in the California Code of Regulations, Title 14, Section 1720(a) (see next page)? Yes☒ No☐

For redrilling or deepening only, is a California Environmental Quality Act (CEQA) document required by a local agency? Yes☐ No☐ If yes, see next page.

The proposed work is as follows: (A complete program is preferred and may be attached.)

Acid Stimulation

Install BOPE. Pull tubing and packer. Acid cup-wash 5-3/4" liner slots.
Redress 8-5/8" packer. Test/scan in with 2-7/8" tubing. Set packer at ~3081' (as before) with tail/bell collar at ~3143'.
Pressure test casing, notifying DOG to witness. If not witnessed, chart pressure test.
Return to injection.
Run injection survey within 90 days..

If well is to be redrilled or deepened, show proposed coordinates (from surface location) and true vertical depth at total depth: _____ feet _____ (Direction) and _____ feet _____ (Direction) Estimated true vertical depth: _____

Will the Field and/or Area change? Yes☐ No☐ If yes, specify New Field: _____ New Area: _____

The Division must be notified immediately of changes to the proposed operations. Failure to provide a true and accurate representation of the well and proposed operations may cause rescission of the permit.

Name of Operator			
Brea Canon Oil Co., Inc.			
Address: 23903 S. Normandie Ave.		City/State: Harbor City, CA	Zip Code: 90710
Name of Person Filing Notice: Rey Javier	Telephone Number: 310 326 4002	Signature: Rey Javier	Date: 8/31/10
Individual to contact for technical questions: Stan Brown	Telephone Number: 805 701 6051	E-Mail Address: sbrown@breacanon.com	

This notice and an indemnity or cash bond must be filed, and approval given, before the workover begins. (See the reverse side for bonding information.) If operations have not commenced within one year of the Division's receipt of the notice, this notice will be considered cancelled.

OG107 (1/09)

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MECHANICAL DIAGRAM

Brea Canon Oil Co., Inc.

Well: STU AC-21

API#: 037-16938
30-4S-13W

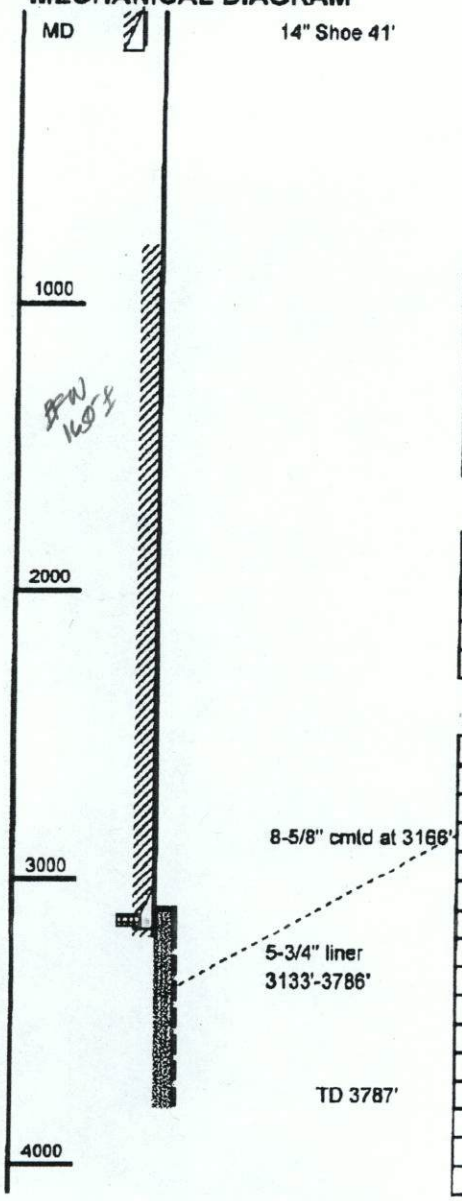
8/31/10

STATUS: **Injection**

KB: 11.25'

TD: 3787'

ED: 3786



CASING RECORD:

Size	Wt/Grade	Top	Shoe	TOC		TOC method
14"		0'	41'	0'		
8-5/8"	36# C-45	0'	3166'	743'	top job 80'	Calc
5-3/4"	22.5# C-45	3133'	3786'	gravel prepacked with 8-12 gravel		

PLUGS:

Top	Bot	Date of Plug

WSO:

Casing	Depth
8-5/8"	3160'

PERFORATIONS:

Casing	Top	Bottom	Length	Type
Original Perfs:				
5-3/4"	3165	3363	198	80M(16-6-2)
5-3/4"	3433	3786	353	80M(16-6-2)

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CHECK LIST – RECORDS RECEIVED AND WELL STATUS

Company:	**Brea Canon**	Well: **"South Torrance Unit" AC-21**
API#:	**037-16938**	Sec. **30**, T. **4S**, R.**13W**. S. B. B. & M.
County:	**Los Angeles**	Field: **Torrance**

RECORDS RECEIVED	DATE
Well Summary (Form OG100)	
History (Form OG103)	7/25/06
Core Record (Form OG101)	
Directional Survey	
Sidewall Samples	
Date final records received.	
Electric Logs:	
Other:	

STATUS			
Producing	☐	Drilling	☐
Abandoned	☐	Idle	☐
Reabandoned	☐	Other	☒ injection

WELL TYPE			
Oil	☐	Waterflood	☒
Gas	☐	Water Disposal	☐
Water Source	☐	Cyclic Steam	☐
Observation	☐	Steam Flood	☐
Exploratory	☐	Fire Flood	☐
Dry Hole	☐	Other	☐

EFFECTIVE DATE: 8/3/05

REMARKS: Rework (conv. to inj)

	ENGINEERS CHECK LIST	CLERICAL CHECK LIST
☒	Summary, History & Core Record (Dupl.)	Location change
☐	Electric Log	Elevation change
☒	Operator's Name	Form OGD121
☒	Signature	Form OGD150b (Release of Bond)
☒	Well Designation	Duplicate logs to archives
☐	Location	Notice of Records Due
☐	Elevation	EDP 2-9-07 um
☒	Notices	District Date Base
☒	"T" Reports press test all MS.	Final Letter (OG159)
☐	Casing Record	Update Center 2-9-07 um
☐	Plugs	
☐	Directional Survey	
☐	Production/Injection (FAP Codes: 20)	
☐	E Well on Prod., enter EDP	**FIELD CHECK LIST**
☐	Surface Inspection Required	Date Surface Inspection Completed:
☐	Surface inspection Waived (Island)	Other:
☐	Well site restoration deferred (common cellar)	
☐	Final Letter Required AB: ☐ REAB: ☐	
☐	Other:	

RECORDS NOT APPROVED	RECORDS APPROVED
(Reason:)	*(Signature)*
	RELEASE BOND
	Date Eligible
	(Use date last needed records received.)
	MAP AND MAP BOOK

Route to: 1) mapping 2) update

#126 1-26-07 WC

OGD2 5/16/01 CYPRESS

SUBMIT IN DUPLICATE

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES

HISTORY OF OIL OR GAS WELL

Operator: Brea Canon Oil Co, Inc. Field: Torrance County: Los Angeles
Well: South Torrance Unit AC-21, Sec 30, T 4S, R 13W, SB B.&M.
A.P.I. No. 037-16938 Name: Rey Javier (Person submitting report) Title: Vice President (President, Secretary or Agent)
Date: 7/25/06
Signature: Rey Javier
23903 S. Normandie Ave, Harbor City, CA 90710 (Address) (310) 326-4002 (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date	
2005	**Convert to Waterflood**
7/28 to 8/3	MIRU production rig. Pulled rods, pump and tubing. Removed 7" casing riser. Ran 8-5/8" 32# positive scraper to liner top at 3133'. Installed new 8-5/8" 36# casing riser. Installed BOPE. RIH with tubing and tagged fill at 3762'. With tubing at 3160', 3360', 3560' and 3700' spotted and displaced 1700 gals 15% HCl. Displaced with 150 bbls injection water at 300 psi. MU Husky M-1 packer and 1-jt tubing tail. Tested in with tubing. Set packer at 3085', bottom of tail at 3116'. Pressure tested casing to 310 psi. Commenced injection.

	BWIPM	PSI
Aug-05	26,475	1080
Sep-05	31,385	1280
Oct-05	35848	1020

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

No. P 105-0275

782 (Field Code)

06 (Area Code)

20 (New Pool Code)

30 (Old Pool Code)

PERMIT TO CONDUCT WELL OPERATIONS

WATERFLOOD PROJECT

Rey Javier, Agent
BREA CANON OIL CO.
23903 S. NORMANDIE AVE
HARBOR CITY, CA 90710

Cypress, California
May 11, 2005

Your proposal to **rework (convert to waterflood)** well "**South Torrance Unit" AC-21**, A.P.I. No. **037-16938**, Section **30**, T. **4S**, R. **13W**, **S.B.** B. & M., **Torrance** Field, **Onshore** area, **Tar, Ranger** and **Main** pools, **Los Angeles** County, dated **4/28/2005**, received **4/29/2005** has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment with hydraulic controls, equivalent to this Division's Class **II2M** requirements, or better, shall be installed and maintained in operating condition.
2. Well killing fluid of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts shall be used.
3. Within three months after injection is started, and every two years thereafter, this Division shall be furnished with sufficient data to confirm the confinement of the injected fluid to the intended zone of injection and to demonstrate the mechanical integrity of the **8 5/8"** casing, injection tubing and packer.
4. Prior to any sustained injection above a gradient of **0.9** psi per foot of depth as measured at the sand face, injectivity and profile tests shall be made. The results of these tests and the proposed method of operations as to input rate, pressure and water distribution by subzones shall be submitted to this Division for approval.
5. A pressure test is conducted to demonstrate the mechanical integrity of the **8 5/8"** casing.
6. This Division shall be consulted and a Supplementary Notice may be required before making any changes in the proposed program.
7. **THIS DIVISION SHALL BE NOTIFIED TO:**
   a. Inspect the installed blowout prevention equipment prior to commencing downhole operations.
   b. Witness a pressure test of the **8 5/8"** casing prior to injection.
   c. Witness the running of an injection survey.

(Continued on Page 2)

CM:cm

cc: Update
EDP
BLANKET BOND
Project Code: M12

Engineer: Chris McCullough

Phone: 714/816-6847

Hal Bopp
State Oil and Gas Supervisor

By _____
For R. K. Baker, *Deputy Supervisor*

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG 111

NOTE:

1. This well shall conform to the provisions set forth in our letter dated **January 24, 1969,** and revisions through **July 31, 1997**, approving the project.
2. A monthly injection report shall be filed with this Division listing the amount of fluid injected, pressure required, and source of injection fluid.
3. An analysis of the fluid being injected and/or the formation fluid shall be submitted on request.
4. The base of the freshwater sands is at **1650′±**. The fresh water is protected by the **8 5/8"** casing cemented at **3166′** with sufficient cement to fill to **1265′**.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

OG/cm

NOTICE OF INTENTION TO REWORK / REDRILL WELL

P# 105-0275

C.E.Q.A. INFORMATION (when redrilling or deepening only)			
EXEMPT ☐	NEG. DEC. ☐	E.I.R. ☐	DOCUMENT NOT REQUIRED BY LOCAL JURISDICTION ☐
CLASS ____	S.C.H. NO. ____	S.C.H. NO. ____	
See Reverse Side			

FOR DIVISION USE ONLY			
BOND	FORMS		EDP WELL FILE
	OGD114	OGD121	
818 JM	5/4/05	5/11/05	—

This notice and an indemnity or cash bond must be filed, and approval given, before rework/redrill begins. (*See the reverse side for bonding information.*) If operations have not commenced within one year of receipt of the notice, this notice will be considered canceled.

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to

rework/redrill well South Torrance Unit AC-21 (*Well designation*), API No. 037-16938

Sec. 30, T. 4S, R. 13W, S.B. B.& M., Torrance Field,

Los Angeles County.

1. The complete casing record of the well (present hole), including plugs and perforations, is as follows:
   8-5/8" 32# cmtd at 3166'.
   5-3/4" 22.5# 3133'-3786' (landed)
   80M slots 3165'-3363', 3433'-3786'

2. The total depth is: 3786 feet. The effective depth is: 3786 feet.

3. Present completion zone (s): Tar, Ranger & Main (*Name*). Anticipated completion zone (s): Same (*Name*).

4. Present zone pressure: 1000 +/- psi. Anticipated/existing new zone pressure: 1000 +/- psi.

5. Last produced: (Current) (*Date*) 3 (*Oil, B/D*) 20 (*Water, B/D*) ____ (*Gas, Mcf/D*)

(or)

Last injected: ____ (*Date*) ____ (*Water, B/D*) ____ (*Gas, Mcf/D*) ____ (*Surface pressure, psig*)

6. Is this a critical well according to the definition on the reverse side of this form? Yes [X] No [ ]

The proposed work is as follows: *(A complete program is preferred and may be attached.)*

Convert to Injection
Install BOPE
Remove production equipment
Cleanout as required
Run 2-7/8" tubing with packer, set packer at ~3100'. Pressure test casing to 250 psi.
Begin injection
Run injection survey within 90 days.

For redrilling or deepening: ____ (*Proposed bottom-hole coordinates*) ____ (*Estimated true vertical depth*)

The division must be notified if changes to this plan become necessary.

Name of Operator	Telephone Number	
Brea Canon Oil Co.	310 326 4002	
Address	City	Zip Code
23903 S. Normandie Ave.	Harbor City, CA	90710
Name of Person Filing Notice	Signature	Date
Rey Javier, Vice President	Rey Javier	4/28/05

File In Duplicate

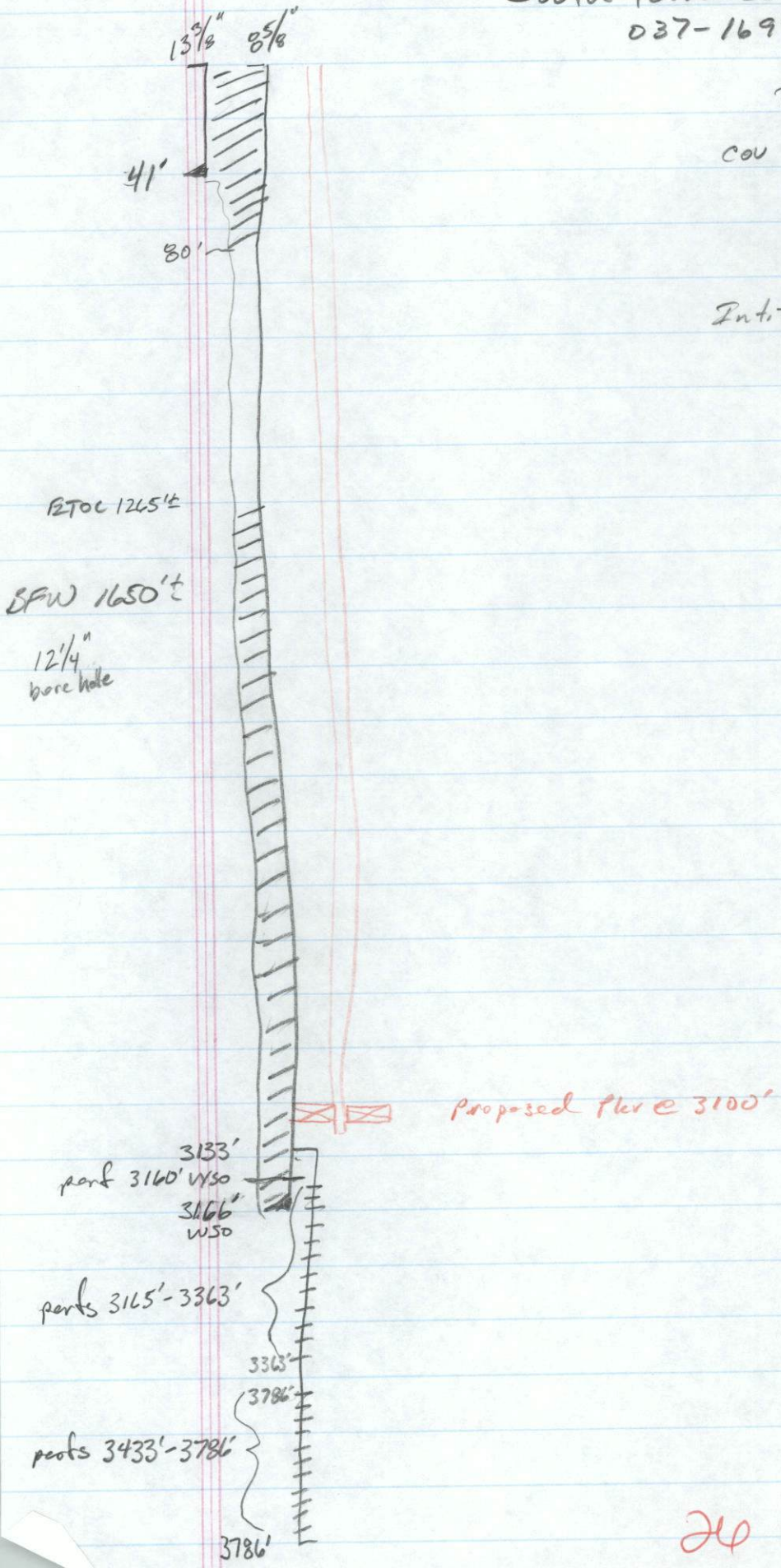
OG107 (7/95/GSR1/5M)

27

"South Torrance Unit" AC-21
037-16938

TAR, Ranger, Main, South
cov to Inj
Grad. D. 9
Proj: M 12

Initial Approv. 1/27/69
Revised 7/31/97



RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION

DIVISION OF OIL AND GAS

REPORT OF CORRECTION OR CANCELLATION

Long Beach, California

June 15, 1994

John S. Duhon
BREA CANON OIL COMPANY
23903 S. Normandie Avenue
Harbor City, CA 90710

In accordance with Well Status Inquiry received 06-13-94

the following change pertaining to your well "South Torrance Unit" C-21-R (037-16938), (Well designation)

Torrance field, Los Angeles County,

Sec. 30, T. 4S, R. 13W, S.B. B. & M., is being made in our records:

☐ The corrected location is

☐ The corrected elevation is

☐ Report No. , dated , has been corrected as follows:

Name returned to "South Torrance Unit" AC-21

☒ Your notice to redrill (Drill, abandon, etc.) dated 10-15-92, and our report No. P 192-1067, issued in answer thereto, are hereby cancelled inasmuch as the work will not be done. If you have an individual bond on file covering this notice, it will be returned. No request for such return is necessary.

☐ Other:

CANCELLATION/ CORRECTION made	Date/Initial
Form 121	6-15-94
Form 177	—
Form 140	—
WELL Form 1	6-15-94
RECORDS: Log Std	—
EDP	ok
BOND	
FIELD MAP	
MAP BOOK	

DEC:sds

cc: EDP
Update

William F. Guerard, Jr.
State Oil and Gas Supervisor

By
For R. K. Baker, *Deputy Supervisor*

OG165 (5/90/GSR1/3M)

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THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

WELL STATUS INQUIRY

Long Beach, California

May 31, 1994

RECEIVED
JUN 0 2 1994
BREA CAÑON OIL CO.

John S. Duhon, Agent
BREA CANON OIL CO.
23903 S. Normandie
HARBOR CITY CA 90710

In a notice dated **10-15-92**, you propose to **redrill** well **"South Torrance Unit" C-21-R**, API No. **037-16938**, Sec. **30**, T. **4S**, R.**13W**, **S.B.** B.& M., **Torrance** Field, **Los Angeles** County.

Please indicate below, conditions or intentions regarding this proposed work and return the completed form to this office within 10 days.

William F. Guerard, Jr.
State Oil and Gas Supervisor

By _____
For R. K. Baker, *Deputy Supervisor*

DEC:gah

___ **PROPOSED WORK HAS BEEN DONE.** (If you check this space, please file the required well records on this work in duplicate within 60 days after work was completed.*)

___ **PROPOSED WORK IS IN PROGRESS AND SHOULD BE COMPLETED ABOUT** _____, 19___.

___ **PROPOSED WORK HAS NOT BEEN DONE, BUT WE STILL INTEND TO DO THE WORK.****

___ **SUPPLEMENTARY NOTICE (Form OG123) ATTACHED.**

___ **PLEASE CONSIDER THIS FORM AS A SUPPLEMENTARY NOTICE.**

___ **WE DO NOT INTEND TO DO THIS PROPOSED WORK.** Please cancel our notice to Redrill STU C-21-R _____, dated 10-15, 1992.

___ **OTHER:** _____

(Signature)

John S. Duhon - Op. Manager.
(Name and Title)

* Division 3 of the Public Resources Code states in part:
Section 3215,...Well records shall be filed 60 days after completion or suspension of proposed work.

** Section 3203,...If operations have not commenced within one year of receipt of the notice, the notice will be considered cancelled. (To prevent cancelation, file a Supplementary Notice with the division.)

OGD3

24

RECEIVED

94 JUN 13 PM 2:44

DIVISION OF OIL & GAS
LONG BEACH, CA

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

Long Beach, California

October 20, 1992

BREA CANON OIL COMPANY
John S. Duhon
23903 S. Normandie
Harbor City, CA 90710

Your request, dated October 15,1992, proposing to change the designation of well(s) in Sec. 30, T. 4S, R 13W, S.B. B. & M., Torrance field, Los Angeles County, District No. 1, has been received.

The proposed change in designation, in accordance with Section 3203, Public Resources Code, is authorized as follows:

Well "South Torrance Unit" AC-21 will hereafter be called "South Torrance Unit" C-21-R (037-16938).

DEC:sds

William F. Guerard, **State Oil and Gas Supervisor**

By [signature]
For R. K. Baker, *Deputy Supervisor*

OGD 157 (9/84/DWRR/1M)

22

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P 192-1067

782 (field code)

06 (area code)

30 (new pool code)

30 (old pool code)

PERMIT TO CONDUCT WELL OPERATIONS

John S. Duhon
BREA CANON OIL CO.
23903 S. Normandie
HARBOR CITY CA 90710

Long Beach, California
October 23, 1992

Your _____ proposal to redrill well "South Torrance Unit" C-21-R, A.P.I. No. 037-16938, Section 30, T. 4S, R. 13W, S.B. B.& M., Torrance field, Onshore area, Main pool, Los Angeles County, dated 10-15-92, received 10-19-92, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment, equivalent to this division's Class II2M requirements, or better, shall be installed and maintained in operating condition.
2. Drilling fluid of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts shall be used while redrilling.
3. A directional survey shall be made and filed with this division.
4. THIS DIVISION SHALL BE NOTIFIED TO:
   Witness a test of the installed blowout prevention equipment prior to drilling below 3135'.

NOTE:
A crew drill may be required at the time of the blowout prevention equipment test.

CANCELLED 6/15/94
Date

DEC:ss

cc: Update
EDP

BLANKET BOND

Engineer David E. Curtis

Phone (310) 590-5311

William F. Guerard, Jr.
Acting State Oil and Gas Supervisor

By T.P.C. Manuel
For R.K. Baker, Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.

OG111

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RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

NOTICE OF INTENTION TO REWORK WELL

FOR DIVISION USE ONLY			
BOND	FORMS		EDP WELL FILE
	OGD114	OGD121	
BB	10/26/92	10/20/92	

This notice and an indemnity or cash bond must be filed, and approval given, before rework begins. *(See the reverse side for bonding information.)* If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well South Torrance Unit - AC - 21 *(Well designation)*, API No. 037 - 16938

Sec. 30, T. 45, R. 13W, SB B.& M., Torrance Field Field,

Los Angeles County.

1. The complete casing record of the well (present hole), including plugs and perforations, is as follows:

Please see attached.

2. The total depth is: 3776 feet. The effective depth is: 3776 feet.

3. Present completion zone (s): Tar-Ranger-Main *(Name)*. Anticipated completion zone (s): Main *(Name)*.

4. Present zone pressure: Hydro psi. Anticipated/existing new zone pressure: Hydro psi.

5. Last produced: 9/92 *(Date)* 4 *(Oil, B/D)* 31 *(Water, B/D)* -- *(Gas, Mcf/D)*

(or)

Last injected: _____ *(Date)* _____ *(Water,B/D)* _____ *(Gas, Mcf/D)* _____ *(Surface pressure, psig)*

6. Is this a critical well according to the definition on the reverse side of this form? Yes ☐ No ☐

The proposed work is as follows: *(A complete program is preferred and may be attached.)*

Please See Attached.

CANCELLED 6/15/94 Date

**Note: Well designated to be changed to C-21-R.

Note: If the well is to be redrilled, show the proposed bottom-hole coordinates and estimated true vertical depth.
The Division must be notified if changes to this plan become necessary.

Name of Operator	Telephone Number	
Brea Canon Oil Company	(310) 326-4002	
Address: 23903 South Normandie	City: Harbor City	Zip Code: 90710
Name of Person Filing Notice: John S. Duhon	Signature: John S Duhon	Date: 10/15/92

File In Duplicate

OG107 (3/90/GSR1/5M)

20

CRITICAL WELL

As defined in the California Code of Regulations, Title 14, Section 1720 (a), "Critical well" means a well within:

1. 300 feet of the following:
   a. Any building intended for human occupancy that is not necessary to the operation of the well; or
   b. Any airport runway.
2. 100 feet of the following:
   a. Any dedicated public street, highway, or nearest rail of an operating railway that is in general use;
   b. Any navigable body of water or watercourse perennially covered by water;
   c. Any public recreational facility such as a golf course, amusement park, picnic ground, campground, or any other area of periodic high-density population; or
   d. Any officially recognized wildlife preserve.

Exceptions or additions to this definition may be established by the State Oil and Gas Supervisor upon his own judgment or upon written request of an operator. The written request must contain justification for such an exception.

WELL OPERATIONS REQUIRING BONDING

1. Drilling, redrilling, or deepening any well.
2. Milling out or removing a casing or liner.
3. Running and cementing casing or tubing.
4. Running and cementing liners and inner liners.
5. Perforating casing in a previously unperforated interval for production, injection, testing, observation, or cementing purposes.
6. Drilling out any type of permanent plug.
7. Reentering an abandoned well having no bond.

BREA CAMON OIL CO.

Rework Program
Redrill and Run New Liner
South Torrance Unit C-21R (Old AC-21)

(Note: All measurements corrected to mat.)

Casing: 18" conductor cemented @ 30'.
8-5/8" 32# J-55 cemented @ 3155', WSO @ 3149'
5-3/4" 22.5# J-55 liner landed at 3776' w/top @ 3122', gravel prepacked to 7' OD and perforated w/slots 0.080" x 2", 16R, 6"C, 3154'-3352' and 3422'-3775'. Bad spot in liner @ 3155', squeezed w/ epoxy 3/84.
Total depth 3776'.

Program:

1. MIRU well service rig. Pull rods, and pump and clean well to bottom.

2. POH with tubing, RIH with 8-5/8" casing scraper on tubing to top of liner at 3122'.

3. POH, laying down tubing. Rig down well service rig.

4. MIRU drilling rig. Install Class IIIB2M BPOE. Pick up 3-1/2" drill pipe and circulate hole clean to 3200'.

5. Cut the 5-3/4" liner at 3155'.

6. Recover the hanger and liner to 3155'. Displace well fluid with a clay base mud having the following characteristics: 72 PCF, 40-45 sec/qt. viscosity, 6-8 ml. water loss, 5% or less solids content and 1% or less sand content.

7. Mill the 5-3/4" liner from 3155' to 3185'.

8. Ream out the open hole to 11 inches.

9. Place neat cement plug from as deep as possible to 3135'.

10. Test operation of BOPE, DOG to witness. Test casing to 500 psi.

11. Clean out cement to the shoe of the 8-5/8" casing with a 7-5/8" bit and drill a 7-5/8" hole to 3850'. Subsurface coordinates at 3850' to be approximately 240' north and 140' west of the surface location of the well.

12. Change over to a KCl-Driscose-NaCl mud having the following characteristics: 72 PCF, 50-60 sec./qt. viscosity, 4 ml. or less water loss, 1%-3% solids content and trace sand content.

18

13. Under ream the hole to 14" diameter from 3850′ to 3590′.

14. Run 736′ of 5-1/2" 17# liner to 3840′ as follows (all depths approximate):

a.	3840′-3839′	Bullnose shoe
b.	3839′-3590′	Perforated 60M slots, 16 rows, 2" slots, 6" centers
c.	3590′-3580′	Blank casing
d.	3580′-3578′	Gravel port collar
e.	3578′-3122′	Blank casing
f.	3122′-3120′	Liner hanger and seal

15. Gravel pack the perforated interval with 282 cubic feet of 8-12 gravel (20% excess of theoretical).

16. Clean out excess gravel and change over to produced lease water.

17. Spot 20 gallons "Polyclean" and 20 gallons "Holeclean" mixed with 20 barrels lease water opposite perforations and let soak for a minimum of 12 hours before proceeding.

18. Run production tubing to total depth and circulate well clean.

19. Raise tubing to 3700′, run pump and rods and return to production.

20. Rig down, move off and clean up well site.

JJM/wp2

15

DIVISION OF OIL AND GAS

CHECK LIST - RECORDS RECEIVED AND WELL STATUS

Company Mobil Oil Corp. Well No. "South Torrance Unit" AC-21

API No. 037-16938 Sec. 30, T. 4S, R. 13W, S.B. B.&M.

County Los Angeles Field Torrance

RECORDS RECEIVED	DATE
Well Summary (Form OG100)	
History (Form OG103)	
Core Record (Form OG101)	
Directional Survey	
Sidewall Samples	
Other	
Date final records received	
Electric logs:	
Casing Profile Caliper Log	2-27-84 (2)
Casing Minimum I.D. Caliper	2-27-84 (2)
Casing Profile Caliper	2-27-84 (2)
Casing Minimum I.D. Caliper	2-27-84 (2)

STATUS		STATUS	
Producing - Oil	___	Water Disposal	___
Idle - Oil	___	Water Flood	___
Abandoned - Oil	___	Steam Flood	___
Drilling - Idle	___	Fire Flood	___
Abandoned - Dry Hole	___	Air Injection	___
Producing - Gas	___	Gas Injection	___
Idle - Gas	___	CO_2 Injection	___
Abandoned - Gas	___	LPG Injection	___
Gas-Open to Oil Zone	___	Observation	___
Water Flood Source	___		

DATE

RECOMPLETED

REMARKS

ENGINEER'S CHECK LIST

1. Summary, History, & Core record (dupl.)
2. Electric Log
3. Operator's Name
4. Signature
5. Well Designation
6. Location
7. Elevation
8. Notices
9. "T" Reports
10. Casing Record
11. Plugs
12. Surface Inspection
13. Production
14. E Well on Prod. Dir. Sur.

CLERICAL CHECK LIST

1. Location change ____ (F-OGD165)
2. Elevation change ____ (F-OGD165)
3. Form OGD121
4. Form OG159 (Final Letter)
5. Form OGD150b (Release of Bond)
6. Duplicate logs to archives
7. Notice of Records due (F-OGD170)

RECORDS NOT APPROVED

Reason:

RECORDS APPROVED

RELEASE BOND

Date Eligible

(Use date last needed records were received.)

MAP AND MAP BOOK

LONG BEACH OFFICE - USE REVERSE SIDE

OGD2 (12/80/DWRR/5M)

FORM 157

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

830 North La Brea Avenue
Inglewood, California

October 22, 1968

~~Mr.~~ Mr. J. J. Oliphant, Agent
Mobil Oil Corporation
10737 S. Shoemaker Ave.
~~Agent for~~ Santa Fe Springs, Calif. 90670

DEAR SIR:

Your ~~request dated~~ letter dated October 10, 1968, relative to change in designation of well(s) in Sec. 30, T. 4 S., R. 13 W., S.B. B. & M., Torrance field, Los Angeles County, District No. 1, has been received;

and in accordance with Section 3203, Public Resources Code, reading in part as follows:

> "* * * The number or designation by which any well heretofore drilled has been known, and the number or designation specified for any well in a notice filed as required by Section 3203, shall not be changed without first obtaining a written consent of the Supervisor."

the proposed change in designation is hereby authorized as follows:

See attached list.

ag
cc: F. E. Kasline
Production Dept.
Conservation Committee

F. E. KASLINE
~~E. R. MURRAY-AARON~~
State Oil and Gas Supervisor

By _____
Deputy Supervisor

△ SPO

13

	Old Designation	New Designation	
Sec. 25:	"Poggi" 1	"South Torrance Unit" D-1	(037-16917)
	" 2	" 2	(037-16918)
	" 3	" AC-3	(037-16919)
	" 10	" D-10	(037-16927)
	" 11	" D-11	(037-16928)
	" 12	" D-12	(037-16929)
	" 16	" AC-16	(037-16933)
	" 17	" AC-17	(037-16934)
	" 26	" AC-26	(037-16941)
	" 31	" AC-31	(037-12946)
	" 32	" AC-32	(037-12947)
	" 35	" D-35	(037-16950)
	" 36	" D-36	(037-16951)
Sec. 30:	"Poggi" 4	"South Torrance Unit" D-4	(037-16920)
	" 5	" AC-5	(037-16921)
	" 6	" AC-6	(037-16922)
	" 7	" 7	(037-16923)
	" 8	" 8	(037-16924)
	" 8-A	" AC-8	(037-16925)
	" 9	" D-9	(037-16926)
	" 13	" D-13	(037-16930)
	" 14	" D-14	(037-16931)
	" 15	" D-15	(037-16932)
	" 18	" AC-18	(037-16935)
	" 19	" 19	(037-16936)
	" 20	" 20	(037-16937)
	" 21	" AC-21	(037-16938)
	" 24	" AC-24	(037-16939)
	" 25	" AC-25	(037-16940)
	" 27	" AC-27	(037-16942)
	" 28	" AC-28	(037-16943)
	" 29	" AC-29	(037-16944)
	" 30	" AC-30	(037-16945)
	" 33	" D-33	(037-16948)
	" 34	" AD-34	(037-16949)
	" 37	" D-37	(037-16952)

SOCONY MOBIL OIL CO., INC.

All wells of GENERAL PETROLEUM CORPORATION transferred to ~~MOBIL OIL COMPANY~~, effective 1-1-60. Change in operating name only. See letter in Ownership file from General Petroleum Corp. dated November 16, 1959.

11

100 7-48
CALIFORNIA STATE PRINTING OFFICE

SUBMIT LOG IN DUPLICATE
FILL THE BLANK IN WITH TYPEWRITER. WRITE ON ONE SIDE OF PAPER ONLY

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
JUL 21 1953
LOS ANGELES, CALIFORNIA

WELL SUMMARY REPORT

Operator GENERAL PETROLEUM CORPORATION Field TORRANCE

Well No. POGGI #21 Sec. 30, T. 4S, R. 13W, S.B. B. & M.

Location 960.82' E'ly along C/L Lomita Blvd. fr. C/L Vermont Ave. thence 536.77' N'ly at right angles.

Elevation above sea level 40.97' K.B. feet.
All depth measurements taken from top of K.B., which is 11.25' feet above ground.

In compliance with the provisions of Chapter 93, Statutes of 1939, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date March 13, 1953 Signed H.F. Power C. L. Doyle

C.L. Doyle (Engineer or Geologist) A.W. Titus (Superintendent) Title General Agent (President, Secretary or Agent)

Commenced drilling July 3, 1952 Completed drilling July 24, 1952 Drilling tools Cable Rotary

Total depth 3787' Plugged depth No Plugs

Junk None

GEOLOGICAL MARKERS	DEPTH

Commenced producing July 27, 1952 Flowing/gas lift/pumping (cross out unnecessary words)
Pumping (date)

	Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
Initial production	65	15.7°	23			
Production after 30 days	54	15.8°	45			

CASING RECORD (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	New or Second Hand	Seamless or Lapweld	Grade of Casing	Size of Hole Drilled	Number of Sacks of Cement	Depth of Cementing if through perforations
14"	41	17		S.H.	(Conductor Pipe)				
8-5/8"	3166	16	36#	S.H.	Mixed	L-W C-45	12-1/4"	800	
5-3/4"	3786	3133	22.5#	S.H.	Smls.	C-45	9"		

PERFORATIONS

Size of Casing	From	To	Size of Perforations	Number of Rows	Distance Between Centers	Method of Perforations
*5-3/4"	3165 ft.	3363 ft.	0.080 M	16	6"	Shop
*5-3/4"	3433 ft.	3786 ft.	"	"	"	"
	Gravel wrapped to 7" O.D. with U.S. 6-8 gravel 14 gauge perforated plate, 3/32" holes on 5/32" centers.					
	ft.	ft.				

Electrical Log Depths 200'/3767' 10 (Attach Copy of Log)

FORM 103
CALIFORNIA STATE PRINTING OFFICE

SUBMIT IN DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
JUL 21 1953
LOS ANGELES, CALIFORNIA

History of Oil or Gas Well

OPERATOR GENERAL PETROLEUM CORP. FIELD TORRANCE

Well No. POGGI #21, Sec. 30, T. 4S, R. 13W, S.B.B. & M.

Form 100 C L Doyle

Signed H.F. Power

Date March 13, 1953 Title General Agent
(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. **Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production.** Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date

1952 This well was drilled by a company crew, using portable rotary drilling equipment. All measurements in this report were taken from the top of the kelly bushings, 11.25' above the concrete mat.

DRILLING A TAR, RANGER AND MAIN ZONE WELL

14" O.D. conductor pipe was set at 41' by a construction crew prior to moving in rotary equipment.

DRILLING TO 3190'

7/3 to 7/15 Rotary drilling equipment was moved in and rigged up and a 12-1/4" hole was spudded on July 3, 1952. 12-1/4" hole was drilled to 1860' where the hole was vertically deviated to total depth.

12-1/4" hole was drilled to 3190'. A Halliburton electrical log was run 200'/3190'.

FISHING AND RECOVERING 8-5/8" CASING

7/15 to 7/19 While attempting to run 8-5/8" casing, the threads pulled out of the collar of the 91st. joint. As the casing dropped, it was caught by the slips, but it parted in several sections further down the hole. All sections were recovered after 5 days of fishing.

CEMENTING 8-5/8" CASING AT 3166'

7/20 3171' of 8-5/8" O.D., S.H., 36#, lapweld and C-45, 8 and 10-V thread, casing with a"down-whirler" cement shoe on bottom and a cast iron baffle ring at 3128' was cemented at 3166' with 700 sax of Victor construction cement. (First 500 sax mixed with 2% gel.) (Slurry weight 112#-128#, all mixed with lime water, mixing time 30 minutes, displacing time 32 minutes. Two top plugs were used which did not bump the baffle ring after displacing with 1046 cu.ft. of mud. Final pressure was 1200 p.s.i. Completed at 4:20 A.M. by B-J Services Inc.)

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Date

1952 The 8-5/8" casing was made up as follows, top to bottom:

AMOUNT	DESCRIPTION
2555.03'	8-5/8" S.H., L.W., 10-V thread casing on top, then,
2.27'	Crossover joint, 10-V to 8-V thread,
613.67'	8-5/8", S.H., C-45, 8-V thread w/cement shoe on bottom.
3170.97'	
4.97'	Above Kelly Bushing
3166'	TOTAL 8-5/8" CASING

7/21 With 1" pipe hanging outside the 8-5/8" casing at 80', approximately 100 sax of Victor construction cement was pumped in bringing cement to the surface. The 8-5/8" casing was landed in the cellar with casing head 16' below the kelly bushings and blow-out-prevention equipment installed. After 16 hours, plugs and cement were cleaned out 3109'/3150' and the 8-5/8" casing was pressure tested with 1000 p.s.i. for 15 minutes with no loss in pressure. Cement was then cleaned out to 3162'.

TESTING W.S.O. ON 4 - 1/2" HOLES IN THE 8-5/8" CASING AT 3160'

7/21 to 7/22 A Johnston combination casing tester and gun perforator was run on dry 4-1/2" O.D. drill pipe including a 3/8" tool bean, 20' of perforated tail pipe, and 2 B-H-P bombs and a 4 shot gun perforator on bottom. The 8-5/8" casing was gun perforated with 4 - 1/2" holes at 3160'. The packer was set at 3130' with the perforated tail pipe extending to 3150' and the valve opened at 6:27 A.M. for a 1 hour test. There was one light puff and no blow for the remainder of the test. When the drill pipe was pulled, there was a recovery of 20' of medium cement cut drilling fluid. The B-H-P charts showed the valve open for 1 hour at 0 p.s.i. The test was witnessed and approved by the D.O.G. on July 21, 1952 as indicating a satisfactory W.S.O. on the 8-5/8" casing through 4 - 1/2" holes at 3160'.

Cement was then cleaned out 3162'/3190'.

FORM 103
CALIFORNIA STATE PRINTING OFFICE

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STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR GENERAL PETROLEUM CORP. FIELD TORRANCE

Well No. POGGI #21, Sec. 30, T. 4S, R. 13W, S.B.B. & M.

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Signed H.F. Power

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Date

1952 DRILLING 3190'/3787'

7/23 to 7/25 7-5/8" hole was drilled 3190'/3780'. A Halliburton electrical log was run 3166'/3767'. The mud in the hole was replaced with O.W. gel and 7-5/8" hole drilled 3780'/3787'. The 12-1/4" hole was opened to 14" 3166'/3190' and 7-5/8" hole opened to 9" 3190'/3787'.

LANDING 5-3/4" LINER AT 3786'

7/26 653.08' of 5-3/4" O.D., 22.5#, S.H., C-45, 10-V thread, A.P.I. range 2, casing, gravel wrapped to 7" O.D. with U.S. 6-8 gravel was landed as liner at 3786', made up as follows, top to bottom:

PERFORATED INTERVAL	AMOUNT	ITEM
	2.80'	Circulating type lead seal hanger, on top then,
	29.00'	Blank 5-3/4" casing
3165'/3363'	197.79'	Perforated with 16 rows, 0.080" x 2" straight slots on 6" centers, gravel wrapped to 7" O.D. with U.S. 6-8 gravel and covered with 14 gauge steel plate w/3/32" holes on 5/32" centers.
	70.33'	Blank 5-3/4" casing
3433'/3786'	353.16'	Perforated casing as above w/bull plug shoe w/steel baffle on bottom.
	653.08'	TOTAL 5-3/4" LINER

BOTTOM OF LINER: 3786' TOP OF LINER: 3133'

COMPLETING:

7/26 2-7/8" O.D. tubing was run to 3749'. The O.W. gel mud in the hole was displaced with 295 barrels of lease crude oil. A pump and rods were run and the rotary

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Well No. POGGI #21, Sec. 30, T. 4S, R. 13W, S.B. B. & M.

Form 100 C L Doyle

Signed H.F. Power

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(President, Secretary or Agent)

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Date

1952 drilling equipment moved out. Production equipment was installed and the well was completed pumping on July 27, 1952, and produced as follows:

DAILY PRODUCTION

	NET BARRELS	GRAVITY	% CUT	REMARKS
7/27				50 barrels circulating oil
7/28				155 barrels circulating oil
7/29				70 barrels circulating oil
7/30	46	15.8°	24	Plus 20 barrels circulating oil
7/31	65	15.7°	23	
8/1	58	16.1°	23	
8/2	51/20 hrs.		21	Off 4 hrs. to change pump
8/3	58	16.1°	20	
8/4	61	16.1°	16	

MONTHLY PRODUCTION

	NET BARRELS	GRAVITY	% CUT	DAYS PRODUCED	DAILY AVERAGE
Aug.	1556	15.8°	16	31	50 B/D
Sept.	1231	15.8°	15	30	41 B/D
Oct.	1199	15.8°	15	31	39 B/D

PRESENT CONDITION OF WELL

CASING RECORD:

14" casing cemented at 41'
8-5/8" casing cemented at 3166', W.S.O. on 4 - 1/2" holes at 3160'
653' of 5-3/4" liner landed at 3786' including 80 M perforations 3165'/3363', 3433'/3786', gravel wrapped to 7" O.D. Top of liner at 3133'.

FORM 103
CALIFORNIA STATE PRINTING OFFICE

SUBMIT IN DUPLICATE

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

History of Oil or Gas Well

OPERATOR GENERAL PETROLEUM CORP. FIELD TORRANCE

Well No. POGGI #21, Sec. 30, T. 4S, R. 13W, S.B. B. & M.

Form 100 C L Doyle

Signed H.F. Power

Date March 13, 1953 Title General Agent
(President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. **Use this form in reporting the history of all important operations at the well, together with the dates thereof, prior to the first production.** Include in your report such information as size of hole drilled to cementing or landing depth of casings, number of sacks of cement used in the plugging, number of sacks or number of feet of cement drilled out of casing, depth at which cement plugs started, and depth at which hard cement encountered. If the well was dynamited, give date, size, position and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position and results of pumping or bailing.

Date

1952

TOTAL DEPTH: 3787' PLUGGED DEPTH: No Plugs

JUNK: None

HOLE SIZE SUMMARY:

12-1/4" - Surface to 3166'
14" - 3166' to 3190'
9" - 3190' to 3787'

ZONES OPEN TO PRODUCTION:

TAR, RANGER & MAIN

P.E. PATTERSON

5

FORM 1672

COMPANY GENERAL PETROLEUM CORP. **LEASE** POGGI **WELL NO.** 21

ELEVATION 40.97' K.B. **LOCATION:** 960.82' E'ly along C/L Lomita Blvd. from C/L Vermont Ave. & 536.77' N'ly at right angles, Los Angeles County.

SPUDDED July 3, 1952 **COMPLETED** July 27, 1952

TOP	BOTTOM	REC'Y	FORMATION
Surface	655		Sand and shale.
655	1239		Sand, shale and gravel.
1239	2587		Sand and shale.
2587	2850		Sand and shale with hard streaks.
2850	3150		Sand and shale.
3150	3190		Shale.
3190	3787		Sand and shale.

TOTAL DEPTH: 3787'

FORM 109-A (10-48)

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off
(FORMATION TESTER)

No. T 152-856

xxxxx Los Angeles 15 Calif. July 24 1952

Mr. Henry F Power
Los Angeles 17 Calif.
Agent for GENERAL PETROLEUM CORPORATION

121

DEAR SIR:

Your well No. "Poggi" 21, Sec 30, T. 4 S, R. 13 W, S B B & M. Torrance Field, in Los Angeles County, was tested for water shut-off on July 21, 1952. Mr. J. F. Matthews, Inspector, designated by the supervisor, was present as prescribed in Secs. 3222 and 3223, Ch. 93, Stat. 1939; there were also present G. Varnum, Engineer; P. Patterson, Engineer.

Shut-off data: 8-5/8 in. 36 lb. casing was cemented xxxx at 3166 ft. on July 20, 1952 in 12-1/4 in. hole with 700 sacks of cement xxxx of which 17 sacks was left in casing.

Casing record of well: 13-3/8" cem. 30'; 8-5/8" cem. 3166', four 1/2" test holes 3160', W.S.O.

Present depth 3190 ft. Bridged with cement from 3166 ft. to 3162 ft. Cleaned out to 3162 ft. for test. A pressure of 1000 lb. was applied to the inside of casing for 15 min. without loss after cleaning out to 3150 ft. A Johnston gun and tester was run into the hole on 4-1/2 in. drill pipe-~~tubing~~ with xxxx ft. of water-mud cushion, and packer set at 3130 ft. with tailpiece to 3150 ft. Tester valve, with 3/8 in. bean, was opened at 6:27 a.m. and remained open for 1 hr. and xxx min. During this interval there was a light puff, and no blow thereafter.

THE INSPECTOR ARRIVED AT THE WELL AT 7:25 A.M. AND MR. VARNUM REPORTED:

1. A 12-1/4" rotary hole was drilled from 30' to 3175'; a 7-5/8" rotary hole, 3175'-3190'.
2. Electrical log readings showed the D-2 marker at 3160'.
3. The 8-5/8" casing was shot-perforated with four 1/2" holes at 3160'.

THE INSPECTOR NOTED:

1. When the drill pipe was removed, 20' of medium, cement-cut, drilling fluid was found in the drill pipe above the tester, equivalent to 0.3 bbl.
2. The recording pressure bomb chart showed that the tester valve was open 1 hr.

The test was completed at 9:00 a.m.

THE 8-5/8" SHUT-OFF AT 3160' IS APPROVED.

JFM:OH

M/B

cc Long Beach

Orig. & 4 cc Mr C L Doyle
General Petroleum Corporation
P O Box 2122 Terminal Annex
LOS ANGELES 54

R. D. BUSH, State Oil and Gas Supervisor

By E. H. Messer, Deputy

3

FORM 111 (1-49)

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STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS

No. P 152-835

Los Angeles 15 Calif. July 7 1952

Mr. Henry F Power
612 South Flower Street
LOS ANGELES 15 Calif.

121

Agent for GENERAL PETROLEUM CORPORATION

DEAR SIR:

Your proposal to drill Well No. "Poggi" 21,

Section 30, T. 4 S, R 13 W, S B B. & M., Torrance Field, Los Angeles County,

dated June 30 1952, received July 2 1952, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

THE NOTICE STATES

"The well is 961' E'ly alg. C/L Lomita Blvd. fr. C/L Vermont Ave. th. 537' N'ly at 90°.
Elevation of ground above sea level 34 feet.
All depth measurements taken from top of kelley bushing, which is 45' K.B. (est.)
We estimate that the first productive oil or gas sand should be encountered at a depth of about _____ feet."

PROPOSAL

"We propose to use the following strings of casing, either cementing or landing them as herein indicated:

Size of Casing	Weight	Grade and Type	Depth	Landed or Cemented
8-5/8"	36#	Lapweld & C-45	3170'	cemented
660' of 5-3/4"	22.5#	C-45	3780'	landed

Well is to be drilled with rotary tools.
It is understood that if changes in this plan become necessary we are to notify you before cementing or landing casing."

DECISION

THE PROPOSAL IS APPROVED PROVIDED THAT

1. Any hole to be sidetracked in any oil or gas zone shall be filled with cement, if possible.
2. The 8-5/8" casing shall be cemented through ports at the base of the fresh water sands with enough cement to reach the surface, or shall be cemented at the shoe with enough cement to fill back of the casing and reach to at least 100' above the base of the fresh water sands.
3. THIS DIVISION SHALL BE NOTIFIED TO WITNESS a test of the effectiveness of the 8-5/8" shut-off.

Records Filed
100 ✓
101 ✓ 7/21/53
103 ✓ LW
E. Log

JLW:OH

M/B

cc Long Beach

Orig. & 4 cc Mr C L Doyle
General Petroleum Corp
P O Box 2122 Terminal Annes
LOS ANGELES 54

R. D. BUSH
State Oil and Gas Supervisor

2

By E. H. Meesser Deputy

43268 4-51 25M SPO
Blanket bond

037-16938

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FORM 105.
CALIFORNIA STATE PRINTING OFFICE

DIVISION OF OIL AND GAS
RECEIVED
JUL 2 1952
LOS ANGELES, CALIFORNIA

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Notice of Intention to Drill New Well

This notice must be given and surety bond filed before drilling begins

Mobil Oil Corp.

Los Angeles, Calif. June 30, 1952

DIVISION OF OIL AND GAS

Los Angeles, Calif.

"South Torrance Unit" AC-21

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of drilling well No. "Poggi" 21, Sec. 30, T. 4-S, JFM

R. 13-W, S. B. B. & M., Torrance Field, Los Angeles County.

Legal description of lease

The well is 961' E'ly alg. C/L Lomita Blvd. fr. C/L Vermont Ave. th. 537' N'ly @ 90°. feet N. or S., and feet E. or W. from

(Give location in distance from section corners or other corners of legal subdivision)

Elevation of ground above sea level 34' feet.

All depth measurements taken from top of kelley bushing, which is 45' K. B. (est.) ~~feet above ground~~

We estimate that the first productive oil or gas sand should be encountered at a depth of about feet.

We propose to use the following strings of casing, either cementing or landing them as herein indicated:

Size of Casing, Inches	Weight, Lb. Per Foot	Grade and Type	Depth	Landed or Cemented
8-5/8"	36#	Lapweld & C-45	3170'	cemented
660' of 5-3/4"	22.5#	C-45	3780'	landed

MAP	MAP BOOK	CARDS	BOND	FORMS 114	FORMS 121
JLW					
28		EB	Blanket	EB	EB

Well is to be drilled with rotary ~~xxxxx~~ tools.

It is understood that if changes in this plan become necessary we are to notify you before cementing or landing casing.

Address 612 South Flower St.
Los Angeles, California

Telephone number MA. 6-5711, Ext. 8492

GENERAL PETROLEUM CORPORATION
(Name of Operator)

By H. F. Power, General Agent

By: C. L. Doyle

ADDRESS ONE COPY OF NOTICE TO DIVISION OF OIL AND GAS IN DISTRICT WHERE WELL IS LOCATED

Dist: D. O. G, File, L. A. File, Power.