

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPLICATE  
(Other instructions on reverse side)Form approved.  
Budget Bureau No. 42-R1121

3. LEASE DESIGNATION AND SERIAL NO.

14-20-603-2168

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

Northwest Cha Cha

8. FARM OR LEASE NAME

NW Cha Cha Unit

9. WELL NO.

21-27

# 38

10. FIELD AND POOL, OR WILDCAT

Cha Cha Gallup

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Sec 27-29N-14W NMPM

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

5676' KB

12. COUNTY OR PARISH

San Juan

13. STATE

New Mexico

## 16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

## NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

☐  
☐  
☐  
☐

PULL OR ALTER CASING

☐  
☐  
☐  
☐

FRACTURE TREAT

MULTIPLE COMPLETION

SHOOT OR ACIDIZE

ABANDON\*

REPAIR WELL

CHANGE PLANS

(Other)

## SUBSEQUENT REPORT OF:

WATER SHUT-OFF

☐  
☐  
☐

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

☐  
☐  
☒

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

12-07-71 - Spot 15 sack cement plug 5230-5130', 15 sack cement plug 4220-4120' WOC.

12-08-71 - Shot 5½" casing at 1575', casing would not free below 1050'. Mix 40 sack cement plug, squeeze 25 sacks out of shot hole at 1575', left top of cement inside casing at 1500'.

12-09-71 - Shot casing off at 1020', pulled casing. Spot 40 sack cement plug 1160-970', 50 sack cement plug 223-123'.

Set regulation dry hole mark marker in top of surface casing with 15 sack cement plug 30-0'.

Intervals between plugs filled with mixed mud.

2-7-72 - Location cleaned ready for inspection.

cc: 2 - NM O&amp;G Commission

1 - Minerals Supervisor - Navajo Tribe

1 - Midland

1 - Clinton

RECEIVED  
FEB 14 1972  
Jt. Operations

18. I hereby certify that the foregoing is true and correct

SIGNED

TITLE

Dist. Superintendent

DATE

2-9-72

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIP  
(Other instructions  
verse side)TE  
reForm approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

14-20-603-2168

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

Northwest Cha Cha

8. FARM OR LEASE NAME

Northwest Cha Cha Unit

9. WELL NO.

21-27

10. FIELD AND POOL, OR WILDCAT

Cha Cha Gallup

11. SEC., T., R., M., OR BLK. AND  
SURVEY OR AREA

Sec 27-29N-14W NMPM

12. COUNTY OR PARISH

San Juan

13. STATE

New Mexico

SUNDRY NOTICES AND REPORTS ON WELLS  
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)1. OIL WELL ☐ GAS WELL ☐ OTHER Water Injection Well

2. NAME OF OPERATOR

Humble Oil &amp; Refining Company

3. ADDRESS OF OPERATOR

P. O. Box 120, Denver, Colorado 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)  
At surface

NENW(660' FNL &amp; 1980' FWL) of Section 27

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

5676' KB

## 16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

## NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐FRACTURE TREAT ☐SHOOT OR ACIDIZE ☐REPAIR WELL ☐(Other) ☐PULL OR ALTER CASING ☐MULTIPLE COMPLETE ☐ABANDON\* ☒CHANGE PLANS ☐

## SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐FRACTURE TREATMENT ☐SHOOTING OR ACIDIZING ☐(Other) ☐REPAIRING WELL ☐ALTERING CASING ☐ABANDONMENT\* ☐(NOTE: Report results of multiple completion on Well  
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Ineffective injector - not necessary for flood. TD 5377', PBTD 5330'. 9-5/8" csg set at 173' w/125 sxs cement circulated to surface, 5 1/2" csg set in 7-7/8" hole at 5376' w/ 200 sxs cement - TOC @ 4120', perforated 5230-5246' w/4 shots/ft.

We propose to plug and abandon well as follows: Spot 15 sxs cement 5230-5130', 15 sxs cement 4220-4120', Run free point and cut and pull as much 5 1/2" casg as possible, spot 40 sxs cement (a 100' plug) between base of Pictured Cliffs @ 1280' and top of Mesaverde @ 2730', spot 40 sxs cement from 1160-1060' across top of Pictured Cliffs @ 1110', 50 sxs cement 223-123' across bottom of surface casing, 14 sxs cement 30-0'. Intervals between plugs to be filled with mixed mud. Place regulation dry hole marker in top of surface casing and clean location for inspection.

cc: 2 - NM O&amp;G Commission

1 - Minerals Supervisor - Navajo Tribe

1 - Midland

RECEIVED

OCT 18 1971

Jt. Operations

18. I hereby certify that the foregoing is true and correct

SIGNED

TITLE

Dist. Chief Engineer

DATE 10-4-71

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

(SUBMIT IN TRIPLICATE)

Indian Agency

Navajo

1	2	3
4	5	6
7	8	9

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY**

Allottee

Lease No.

24-20-605-2168

## SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	SUBSEQUENT REPORT OF WATER SHUT-OFF	
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	Convert to Water Injection Well	2

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

March 6, 1963

Well No. 24-27 is located 640 ft. from N line and 1900 ft. from W line of sec. 2724-2727N21W27W

(1/4 Sec. and Sec. No.)

(Twp.)

(Range)

(Meridian)

24-27San JuanNew Mexico

(Field)

(County or Subdivision)

(State or Territory)

The elevation of the derrick floor above sea level is 5675 ft.

### 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.)

RD 5377'; 1963 5330'.

Well tubing pulled, tubinghead removed, replaced with gauge and valve assembly, converting to water injection for Secondary Recovery through original perforations.

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

Company Smith Oil & Refining CompanyAddress P. O. Box 308Deming, New MexicoBy COPY (ORIGINAL SIGNED) B. M. BRADLEYTitle Dist. Supt.

(SUBMIT IN TRIPLICATE)

Indian Agency **Navajo Tribal**

X					

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Allottee

Lease No. **14-20-603-2168**

## SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
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		<b>Sandoll Frac.</b>	<b>X</b>

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

June 22, 1960

Ojo Amarillo

Well No. **2** is located **660** ft. from **N** line and **1980** ft. from **W** line of sec. **27**  
**NE/4 NW/4 Section 27** **39N** **14W** **NMPM**  
(Twp.) (Range) (Meridian)  
**Undesignated Gallup** **San Juan** **New Mexico**  
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is **5675** ft.

## 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)

June 11, 1960 Total Depth **5377'** Clean Out Total Depth **5330'**

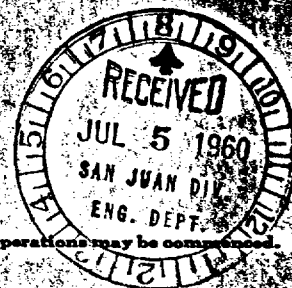
**Sandoll fractured Lower Gallup perforated intervals 5230'-5246' (perf. 4 sh./ft.)**  
**with 49,350 gals. lease crude and 80,000# sand. Breakdown pressure 1500 psig;**  
**maximum treating pressure 2100 psig. Average treating pressure 2000 psig.**  
**Injection Rate: 36.6 bbls./min. Flush with 5250 gals. lease crude. Dropped**  
**32 perforation ball sealers one time.**

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

Company **El Paso Natural Gas Products Company**Address **Post Office Box 1560**  
**Farmington, New Mexico**

ORIGINAL SIGNED BY: JOSEPH E. KREGER

By

Title **Petroleum Engineer**



(SUBMIT IN TRIPLICATE)

Indian Agency Navajo Tribal

X		

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Allottee \_\_\_\_\_  
Lease No. 14-20-603-2168

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)

June 17, 1960

**Ojo Amarillo**  
Well No. 2 is located 660 ft. from N line and 1980 ft. from W line of sec. 27  
NE/4 NW/4 Section 27 29N 14W NMPM  
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)  
Undesignated San Juan New Mexico  
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 5675 ft.

DETAILS OF WORK

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

**June 5, 1960 Total Depth 3377'.**

**Ran 129 joints, 5-1/2", 15.50#, J-55 Casing (5363.41') set at 5375.91' with 100 sacks regular cement, 100 sacks Pozmix, 2% gel, 25# Gilsomite per sack.**

**Held 1000#/30 Minutes.**

**Top of cement by temperature survey at 4120'.**



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

Company El Paso Natural Gas Products Co.

Address Post Office Box 1560  
Farmington, New Mexico

ORIGINAL SIGNED BY: JOSEPH E. KREGER  
By \_\_\_\_\_

Title Petroleum Engineer

(SUBMIT IN TRIPLICATE)

Indian Agency **Navajo Tribal**

	<b>X</b>		

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Allottee \_\_\_\_\_  
Lease No. **14-20-603-2168**

**SUNDRY NOTICES AND REPORTS ON WELLS**

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	<b>X</b>
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)

U. S. GEOLOGICAL SURVEY  
FARMINGTON, NEW MEXICO

May 18, 1960

**Ojo Amarillo**

Well No. **2** is located **660** ft. from **N** line and **1980** ft. from **W** line of sec. **27**

**NE/4 NW/4 Section 27**

**29N**

**14W**

**NMPM**

(34 Sec. and Sec. No.)

(Twp.)

(Range)

(Meridian)

**Undesignated**

**San Juan**

**New Mexico**

(Field)

(County or Subdivision)

(State or Territory)

The elevation of the derrick floor above sea level is **3675** ft.

**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)

Spud Date: **May 15, 1960. May 16, 1960 Total Depth 180'.**

**Ran 3 joints, 9-5/8", 36,000, J-55 Csg. (161.28') set at 175.31' with 125 sacks regular cement, 3% CaCl<sub>2</sub> circulated to surface. Held 500#/30 Minutes.**

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

Company **El Paso Natural Gas Products Company**

Address **Post Office Box 1565**

**Farmington, New Mexico**

ORIGINAL SIGNED BY: **WILLIAM K. GLAZIER**  
By \_\_\_\_\_

Title **Petroleum Engineer**

(SUBMIT IN TRIPLICATE)

Indian Agency Navajo Tribal

X

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY**

MAY 18 1960  
P. J. M. Walsh  
P. J. M. Walsh  
DISTRICT ENGINEER

Allottee \_\_\_\_\_

Lease No. 14-20-603-2168

**SUNDRY NOTICES AND REPORTS ON WELLS**

NOTICE OF INTENTION TO DRILL	X	SUBSEQUENT REPORT OF WATER SHUT-OFF	MAY 13 1960
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	S. GEOLOGICAL SURVEY
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	FARMINGTON, NEW MEXICO
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)

**VERBAL APPROVAL RECEIVED MAY 14, 1960.**

May 16, 1960

**Ojo Amarillo**

Well No. 2 is located 660 ft. from N line and 1980 ft. from W line of sec. 27

NE/4 NW/4 Section 27  
(1/4 Sec. and Sec. No.)

29N  
(Twp.)

14W  
(Range)

NMPM  
(Meridian)

Undesignated  
(Field)

San Juan  
(County or Subdivision)

New Mexico  
(State or Territory)

The elevation of the derrick floor above sea level is 5675 ft.

**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)

It is intended to drill a well through the Lower-Gallup Formation using rotary tools and mud circulation. Possible productive intervals will be perforated and sandoil fractured. Estimated Total Depth 5400'.

**Casing Program:**

9-5/8" at 160' with 125 sacks cement circulated to surface.

5-1/2" at 5400' with 200 sacks cement.

The NE/4 NW/4 of Section 27 is dedicated to this well.

NE/4 NW/4 Section 27 Navajo Tribal 14-20-603-2168



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

Company El Paso Natural Gas Products Company

Address Post Office Box 1565

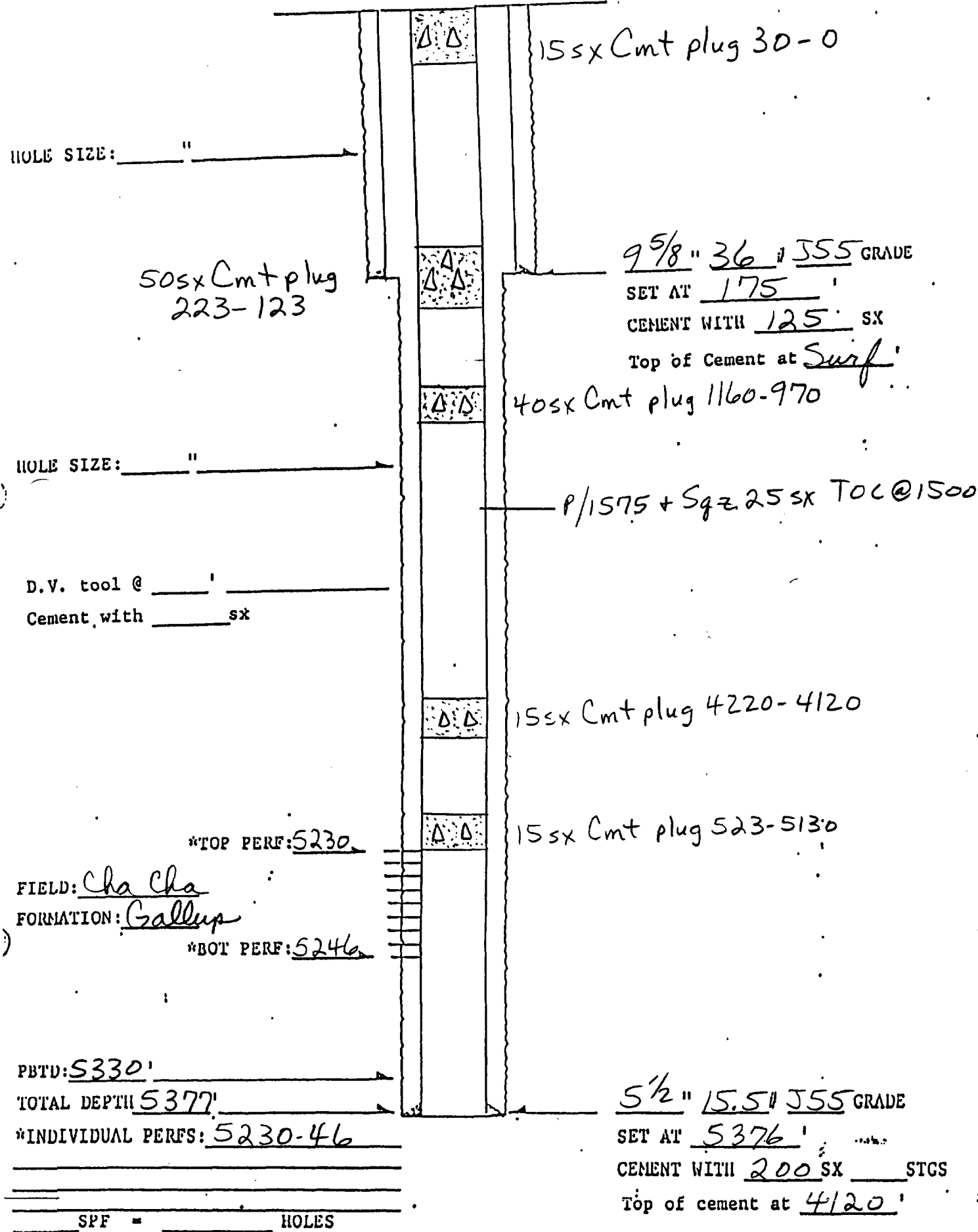
Farmington, New Mexico

Original Signed EWELL N. WALSH  
By \_\_\_\_\_

Title Petroleum Engineer

WELLBORE DIAGRAM

Intervals between plugs filled w/mixed mud PF  
\*B.ELEV.: 5675  
K.B. CORRECTION:  
G.L.ELEV.: 5664



LEASE NAME: Cha Cha WELL NO.: 2721 27-2

WELLBORE DIAGRAM AS OF DATE: 11/1/90

STATE: Nm COUNTY: San Juan Unit BLOCK: C SECTION: 27

TOWNSHIP: 29N RANGE: 14W LEGAL: 660 N 1980 W

OPERATOR: SOI WORKING INTEREST: \_\_\_\_\_ ROYALTY INTEREST: \_\_\_\_\_

COMPLETION DATE: 6/24/60 CURRENT STATUS: (PWP) (FLOW) (INJ) (T/A) (SI) P+A

REMARKS: