

Form 3160-5 (June 2015)

MAY 3 1 2019 **UNITED STATES**

DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT Farmington Field Office

FORM APPROVED OMB No. 1004-0137

Expires: January 31, 2018

5. Lease Serial No. N0-G-1404-1963

SUNDRY NOTICES AND REPORTS ON WELL'S Land Management of If Indian, Allottee or Tribe Name

abandoned well. Use Form 3160-3 (A)			
SUBMIT IN TRIPLICATE - Other instru	7. If Unit of CA/Agreement, Name and/or No. NMNM135255A		
1. Type of Well			
⊠Oil Well □Gas Well □Other	8. Well Name and No. KIMBETO WASH UNIT 772H		
2. Name of Operator Enduring Resources IV LLC	9. API Well No. 30-045-35825		
3a. Address 200 Energy Court Farmington NM 87401	3b. Phone No. (include area code) 505-636-9743	10. Field and Pool or Exploratory Area Basin Mancos	
4. Location of Well <i>(Footage, Sec., T.,R,M., or Survey Description)</i> SHL: 181' FNL & 2377' FWL SEC 28 23N 9W BHL: 500' FNL & 1928' FEL SEC 20 23N 9W		11. Country or Parish, State San Juan, NM	
12. CHECK THE APPROPRIATE BO	OX(ES) TO INDICATE NATURE OF NO	OTICE, REPORT OR OTHER DATA	
TYPE OF SUBMISSION	CTION		

TYPE OF SUBMISSION	HECK THE AFFROMMATE E		RE OF NOTICE, REPORT OR OTHER PE OF ACTION	DATA
Notice of Intent	Acidize	Deepen	□Production(Start/Resume)	☐Water ShutOff
	☐Alter Casing	☐ Hydraulic Fracturing	Reclamation	■Well Integrity
Subsequent Report	Casing Repair	☐ New Construction	Recomplete	⊠Other
Final Abandonment Notice	☑ Change Plans	☐ Plug and Abandon	Temporarily Abandon	Amended
I mar / tourdonnient / touce	Convert to Injection	Plug Back	☐Water Disposal	Change in
BP		-		Plans



Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfounded or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

Enduring Resources request an amended change in plans per attached updated:

- C102
- Drilling program & casing program/Ops plan
- **BHL & POE**
- Directional plans
- Wellbore

ADHERE TO PREVIOUS NMOCD CONDITIONS OF APPROVAL

MOCD

JUN 05 2019

DISTRICT III

OUTSTITUTE	
14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) Lacey Granillo	Title Permit Specialist
Signature	Date 5/31/19
THE SPACE FOR FEDE	RAL OR STATE OFICE USE
Approved by Jon JUL	Petroleum Engineer Date 03 Jun 2019
Conditions of approval, if any, are attached. Approval of this notice does not warrant certify that the applicant holds legal or equitable title to those rights in the subject lead which would entitle the applicant to conduct operations thereon.	

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



District I
1625 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First Street, Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 746-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Drive, Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised August 1, 2011

Submit one copy to Appropriate District Office

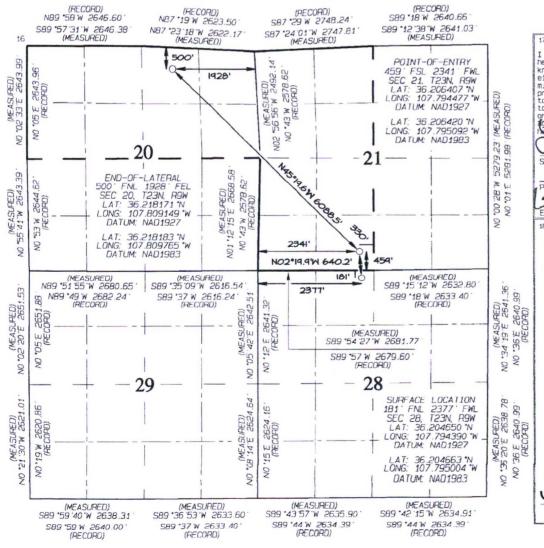
AMENDED REPORT

OIL CONSERVATION DIVISION 1220 South St. Francis Drive Santa Fe, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

	API Number			Pool Coo			Pool Nam BASIN MAN		
20-04-	5-35	000		97232			105		
1Property	¹Property Code			Property	Name			*Well Number	
321239				KIMBETO W	ASH UNIT			772H	
'OGRID No.				"Operator	Name			"Elevation	
372286 EN			The state of the s	SOURCES, LLC			6534		
	,				¹⁰ Surface	Location			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West li	ne County
C	28	23N	9W		181	NORTH	2377	WEST	SAN JUAN
		1	1 Botto	m Hole	Location I	f Different	From Surfac	е	
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West li	ine County
В	20	NES	9W		500	NORTH	1928	EAST	SAN JUAN
Dedicated Acres	Acres N/2 - Section 20			19 Joint or Infill	¹⁴ Consolidation Code	15 Order No.	1084		

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



17 OPERATOR CERTIFICATION THEMAIUM CEMITFICATION

I hereby certify that the information contained herein is true and compilete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom-hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling offeenent on a compulsory pooling order hatelofore entern by the division. 18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date Revised: MAY 29, 2019 Survey Date: OCTOBER 2, 2015 Signature and Seal of Professional Surveyor EDWARDS JASON MEXICO KW ACTION AND ESSION SAMEYOR JASON DWARDS Certificate Number 15269



ENDURING RESOURCES IV, LLC 1050 SEVENTEENTH STREET, SUITE 2500 **DENVER, COLORADO 80265**



DRILLING PLAN:

Drill, complete, and equip single lateral in the Mancos-I formation

WELL INFORMATION:

Name: KIMBETO WASH UNIT 772H

API Number: 30-045-35825 State: New Mexico

County: San Juan

Surface Elevation:

6,534 ft ASL (GL)

6,562 ft ASL (KB)

Surface Location: 28-23N-09W Sec-Twn-Rng

181 ft FNL

2,377 ft FWL

36.204663 ° N latitude

107.795004 ° W longitude

(NAD 83)

BH Location: 20-23N-09W Sec-Twn-Rng

500 ft FNL

1,928 ft FEL

36.218183 ° N latitude

107.809765 ° W longitude

(NAD 83)

Driving Directions: FROM THE INTERSECTION OF US HWY 550 & US HWY 64 IN BLOOMFIELD, NM: South on US Hwy 550 for 37.8 miles to MM 113.4; Right (SW) on CR 7890 for 0.8 miles to fork; Left (S) remaining on 7890 for 1.3 miles to 4-way intersection; Left (SE) on 7890 for 0.6 miles to fork; Right (SW) remaining on 7890 for 0.5 miles; Right (W) on access road for W Lybrook Unit 720H location for 0.6 miles to fork; Left (W) on access road for W Lybrook Unit 726H location for 0.7 miles to fork; Left (W) on access road for W Lybrook Unit 730H location for 1.9 miles; Right (N) on access road for 0.4 miles to Kimbeto Wash Unit 736H Pad (Wells: KWU 772H, 774H, 793H, 794H, 795H).

GEOLOGIC AND RESERVOIR INFORMATION:

Prognosis:

Formation Tops	TVD (ft ASL)	TVD (ft KB)	MD (ft KB)	O/G/W	Pressure
Ojo Alamo	6,488	74	74	W	normal
Kirtland	6,391	171	171	W	normal
Fruitland	6,131	431	431	G, W	sub
Pictured Cliffs	5,781	781	781	G, W	sub
Lewis	5,576	986	986	G, W	normal
Chacra	5,391	1,171	1,171	G, W	normal
Cliff House	4,386	2,176	2,181	G, W	sub
Menefee	4,371	2,191	2,196	G, W	normal
Point Lookout	3,381	3,181	3,197	G, W	normal
Mancos	3,105	3,457	3,476	O,G	sub (~0.38)
Gallup (MNCS_A)	2,879	3,683	3,704	O,G	sub (~0.38)
MNCS_I	2,165	4,397	4,646	O,G	sub (~0.38)
P.O.E. TARGET	2,143	4,419	4,812	O,G	sub (~0.38)
B.H.L. TARGET	2,103	4,459	10,901	O,G	sub (~0.38)

Surface: Nacimiento

Oil & Gas Zones: Several gas bearing zones will be encountered; target formation is the Gallup

Pressure: Normal (0.43 psi/ft) or sub-normal pressure gradients anticipated in all formations

Max. pressure gradient: 0.43 psi/ft

Evacuated hole gradient:

0.22 psi/ft

Maximum anticipated BH pressure, assuming maximum pressure gradient: Maximum anticipated surface pressure, assuming partially evacuated hole: 1,920 940

psi psi

Temperature: Maximum anticipated BHT is 125° F or less

H₂S INFORMATION:



H₂S Zones: Encountering hydrogen-sulfide bearing zones is **NOT** anticipated.

Safety: Sensors and alarms will be placed in the substructure, on the rig floor, above the pits, and at the shakers.

LOGGING, CORING, AND TESTING:

Mud Logs: None planned; gas detection from drill out of 13-3/8" casing to TD; remote geo-steering from drill out of 9-5/8"

casing to TD.

MWD / LWD: MWD surveys with inclination and azimuth in 100' stations (minimum) from drill out of 13-3/8" casing to TD;

Gamma Ray from drill out of 9-5/8" casing to TD; Gamma Ray optional in 12-1/4" intermediate hole

Open Hole Logs: None planned

Testing: None planned **Coring:** None planned

Cased Hole Logs: CBL on 5-1/2" casing from deepest free-fall depth to surface

DRILLING RIG INFORMATION:

Contractor: Ensign

Rig No.: 773

Draw Works: Pacific Rim 1500AC

Mast: ADR 1500S Cantilever Triple (142 ft, 800,000 lbs, 12 lines)

Top Drive: Tesco 500-ESI-1350 (500 ton, 1,350 hp)

Prime Movers: 3 - CAT 3512 (1,475 hp)

Pumps: 3 - Gardner-Denver PZ11 (7,500 psi)

BOPE 1: Cameron single gate ram & double gate ram (13-5/8", 10,000 psi)

BOPE 2: Cameron annular (13-5/8", 10,000 psi)

Choke 3", 10,000 psi

KB-GL (ft): 28

Note: Actual drilling rig may vary depending on availability at time the well is scheduled to be drilled.

BOPE REQUIREMENTS:

See attached diagram for details regarding BOPE specifications and configuration.

- 1) Rig will be equipped with upper and lower kelly cocks with handles available.
- 2) Inside BOP and TIW valves will be available to use on all sizes and threads of drill pipe used while drilling the well.
- 2) BOP accumulator will have enough capacity to open the HCR valve, close all rams and annular preventer, and retain minimum of 200 psi above precharge on the closing manifold without the use of closing pumps. The fluid reservoir capacity shall be at least double the usable fluid volume of the accumulator system capacity, and the fluid level shall be maintained at manufacturer's recommendation. There will be two additional sources of power for the closing pumps (electric and air). Sufficient nitrogen bottles will be available and will be recharged when pressure falls below manufacturer's recommended minimum.
- 3) BOP testing shall be conducted (a) when initially installed, (b) whenever any seal is broken or repaired, (c) if the time since the previous test exceeds 30 days. Tests will be conducted using a test plug. BOP ram preventers will be tested to 3,000 psig for 10 minutes, and the annular preventer will be tested to 1,500 psi for 10 minutes. Ram and annular preventers will be tested to 250 psi for 5 minutes. Additionally, BOP and casing strings will be tested to .22 psi/ft or 1,500 psi, whichever is greater but not exceeding 70% of yield strength of the casing, for 30 minutes, prior to drilling out 13-3/8" and 9-5/8" casing. Rams and hydraulically operated remote choke line valve will be function tested daily at a minimum.
- 4) Remote valve for BOP rams, HCR, and choke shall be placed in a location that is readily available to the driller. The remote BOP valve shall be capable of closing and opening the rams.
- 5) Manual locking devices (hand wheels) shall be intalled on rams. A valve will be installed on the annular preventer's closing line as close as possible to the preventer to act as a locking device. The valve will be maintained in the open position and shall only be closed when the there is no power to the accumulator.

FLUIDS AND SOLIDS CONTROL PROGRAM:

Fluid Measurement: Pumps shall be equipped with stroke counters with displays in the dog-house. Slow pump speed shall be recorded daily and after mudding up, at a minimum, on the drilling report. A Pit Volume Totalizer will be installed and the readout will be displayed in the dog-house. Gas-detecting equipment will be installed at the shakers, and readouts will be available in the dog-house and the in the geologist's work-station (if geologist or mud-logger is on-site).

Closed-Loop System: A fully, closed-loop system will be utilized. The system will consist of above-ground piping and above-ground storage tanks and bins. The system will not entail any earthen pits, below-grade storage, or drying pads. All equipment will be disassembled and removed from the site when drilling operations cease. The system will be capable of storing all fluids and generated cuttings and of preventing uncontrolled releases of the same. The system will be operated in an efficient manner to allow the recycling and reuse of as much fluid as possible and to minimimize the amount of fluids and solids that require disposal.

Fluid Disposal: Fluids that cannot be reused, recycled, or returned to the supplier will be hauled to and disposed of at an approved disposal site (Industrial Ecosystem, Inc. or Envirotech, Inc.).

Solids Disposal: Drilling solids will be stored (until haul-off) on-site in separate containers with no other waste, debris, or garbage products. Waste solids will be hauled to and disposed of at an approved disposal site (Industrial Ecosystem, Inc. or Envirotech, Inc.).

Fluid Program: See "Detailed Drilling Plan" section for specifics.

DETAILED DRILLING PLAN:

SURFACE: Drill vertically to casing setting depth (plus necessary rathole), run casing, cement casing to surface.

_					
i	0 ft (MD)	to	300 ft (MD)	Hole Section Length:	300 ft
	0 ft (TVD)	to	300 ft (TVD)	Casing Required:	300 ft

Note: Surface hole may be drilled, cased, and cemented with a smaller rig in advance of the drilling rig.

			FL		YP		
Fluid:	Type	MW (ppg)	(mL/30 min)	PV (cp)	(lb/100 sqft)	рН	Comments
	Fresh Water	8.4	N/C	2 - 8	2 - 12	9.0	Spud mud

Hole Size: 17-1/2"

Bit / Motor: Mill Tooth or PDC, no motor MWD / Survey: No MWD, deviation survey

Logging: None

Casing Specs:

Specs Loading Min. S.F.

						Tens. Body	Tens. Conn
	Wt (lb/ft)	Grade	Conn.	Collapse (psi)	Burst (psi)	(lbs)	(lbs)
13.375	54.5	J-55	BTC	1,130	2,730	853,000	909,000
		美国的第 点4户下	10.	131	542	114,258	114,258
				8.62	5.04	7.47	7.96

Assumptions: Collapse: fully evacuated casing with 8.4 ppg equivalent external pressure gradient

Burst: maximum anticipated surface pressure with 9.5 ppg fluid inside casing while drilling

intermediate hole and 8.4 ppg equivalent external pressure gradient Tension: buoyed weight in 8.4 ppg fluid with 100,000 lbs over-pull

MU Torque (ft lbs):

Minumum:

N/A

Optimum: N/A

Maximum:

N/A

Make-up as per API Buttress Connection running procedure. Casing Details: Float shoe, 1 jt casing, float collar, casing to surface

Centralizers: 2 centralizers per jt stop-banded 10' from each collar on bottom 3 jts, 1 centralizer per 2 jts to surface

Cement:

			Yield	Water	Hole Cap.		Planned TOC	Total Cmt
:	Type	Weight (ppg)	(cuft/sk)	(gal/sk)	(cuft/ft)	% Excess	(ft MD)	(sx)
	Class G	15.8	1.180	5.24	0.6946	100%	0	353

Calculated cement volumes assume gauge hole and the excess noted in table

Halliburton HALCEM surface cementing blend

Notify NMOCD & BLM if cement is not circulated to surface. Cement must achieve 500 psi compressive strength before drilling out (estimated minimum WOC time is 6 hours).

INTERMEDIATE: Drill as per directional plan to casing setting depth, run casing, cement casing to surface.

300 ft (MD)	to	2,509 ft (MD)	Hole Section Length:	2,209 ft
300 ft (TVD)	to	2,500 ft (TVD)	Casing Required:	2,509 ft

			FL		YP		
Fluid:	Type	MW (ppg)	(mL/30 min)	PV (cp)	(lb/100 sqft)	pН	Comments
	LSND	8.8 - 9.5	20	8 - 14	8 - 14	9.0 - 9.5	OBM as contingency

Hole Size: 12-1/4"

Bit / Motor: PDC w/mud motor

MWD / Survey: MWD surveys with inclination and azimuth in 100' stations (minimum), GR optional

Logging: None

Pressure Test: NU BOPE and test (as noted above); pressure test 13-3/8" casing to

1,500 psi for 30 minutes.

Tens. Body Tens. Conn Casing Specs: Wt (lb/ft) Grade Conn. Collapse (psi) Burst (psi) (lbs) (lbs) 9.625 36.0 J-55 LTC 2,020 3,520 564,000 Specs 453,000 Loading 1,092 1,083 178,767 178,767 Min. S.F. 1.85 3.25 3.15 2.53

Assumptions: Collapse: fully evacuated casing with 8.4 ppg equivalent external pressure gradient

Burst: maximum anticipated surface pressure with 9.5 ppg fluid inside casing while drilling

production hole and 8.4 ppg equivalent external pressure gradient Tension: buoyed weight in 8.4 ppg fluid with 100,000 lbs over-pull

MU Torque (ft lbs):

Minumum:

3,900

Optimum:

5,200 Maximum:

6.500

Casing Details: Float shoe, 1 jt casing, float collar, casing to surface

Centralizers: 2 centralizers per jt stop-banded 10' from each collar on bottom 3 jts, 1 centralizer per 2 jts to surface

		· · · · · · · · · · · · · · · · · · ·	Yield	Water		Planned TOC	Total Cmt	
Cement:	Type	Weight (ppg)	(cuft/sk)	(gal/sk)	% Excess	(ft MD)	(sx)	
Lead	G:POZ Blend	12.3	1.960	10.12	70%	0	559	
Tail	Class G	15.8	1.148	4.98	20%	2,009	164	1

Annular Capacity

0.3627 cuft/ft

9-5/8" casing x 13-3/8" casing annulus

0.3132 cuft/ft

9-5/8" casing x 12-1/4" hole annulus

Calculated cement volumes assume gauge hole and the excess noted in table

Halliburton ECONOCEM & HALCEM cementing blend

Notify NMOCD & BLM if cement is not circulated to surface. Cement must achieve 500 psi compressive strength before drilling out (estimated minimum WOC time for tail slurry is 6 hours).

PRODUCTION: Drill to TD following directional plan, run casing, cement casing to surface.

2,509	ft (MD)	to	10,901 ft (MD)	Hole Section Length:	8,392 ft
2,500	ft (TVD)	to	4,459 ft (TVD)	Casing Required:	10,901 ft

Estimated KOP:	3,823 ft (MD)	3,800 ft (TVD)
Estimated Landing Point (P.O.E.):	4,812 ft (MD)	4,419 ft (TVD)
Estimated Lateral Length:	6,089 ft (MD)	The second of th

YP Fluid: Type MW (ppg) FL (mL/30') PV (cp) (lb/100 sqft) pH Comments LSND 8.8 - 9.520 8 - 14 8 - 14 9.0 - 9.5**OBM** as contingency

Hole Size: 8-1/2"

Bit / Motor: PDC w/mud motor

MWD / Survey: MWD surveys with inclination and azimuth in 100' stations (minimum) before KOP, every joint from KOP to POE,

every 100' (minimum) from POE to TD; Gamma Ray from drill out of 9-5/8" shoe to TD

Logging: MWD Gamma Ray for entire section, no mud-log or cuttings sampling, no OH WL logs

1,500 Pressure Test: NU BOPE and test (as noted above); pressure test 9-5/8" casing to

Tens. Conn Tens. Body Casing Specs: Wt (lb/ft) Grade Collapse (psi) Burst (psi) (lbs) Size (in) Conn. (lbs) Specs 5.500 17.0 P-110 LTC 7,460 10,640 546,000 445,000 Loading 2,203 8,917 259,912 259.912 3.39 1.19 2.10 1.71 Min. S.F.

Assumptions: Collapse: fully evacuated casing with 9.5 ppg fluid in the annulus (floating casing during running)

Burst: 8,500 psi maximum surface treating pressure with 10.2 ppg equivalent mud weight sand laden

Maximum:

fluid with 8.4 ppg equivalent external pressure gradient

Tension: buoyed weight in 9.0 ppg fluid with 100,000 lbs over-pull

MU Torque (ft lbs):

Minumum:

3,400

Optimum:

4.530

5,660

psi for 30 minutes.

Casing Details: Float shoe, float collar, 2 its casing, float collar, 1 it casing, toe-initiation sleeve, 20' marker joint, toe-initiation sleeve, casing to KOP with 20' marker joints spaced evenly in lateral every 2,000'. Place Floatation Sub at KOP.

Continue running casing to surface. The toe-initiation sleeves must be positioned INSIDE the 330' unit setback.

Centralizers: Centralizer count and placement may be adjusted based on well conditions and as-drilled surveys.

Lateral: 1 centralizer per joint

POE to KOP: 1 centralizer per joint from landing point to KOP

KOP to surface: 1 centralizer per 2 joints from KOP to 9-5/8" shoe, 1 per 3 joints from 9-5/8" shoe to surface

Yield Planned TOC **Total Cmt** Water Cement: (cuft/sk) (ft MD) Type Weight (ppg) (gal/sk) % Excess (sx) Lead G:POZ blend 12.3 1.960 10.11 50% 726 0 3,704 Tail G:POZ blend 13.3 1.354 5.94 10% 1,339

Annular Capacity

0.2691 cuft/ft 5-1/2" casing x 9-5/8" casing annulus

0.2291

5-1/2" casing x 8-1/2" hole annulus

Calculated cement volumes assume gauge hole and the excess noted in table

Halliburton ECONOCEM & EXTENDACEM cementing blend

Notify NMOCD & BLM if cement is not circulated to surface.

Note: The lateral may be drilled outside the applicable unit setback to maximize the length of the completed interval and to maximize resource recovery. If the well is drilled outside the setback, the toe initiation sleeve(s) and all perforations will be placed inside the setback. An unorthodox location application is not required because the completed interval will be entirely within the setback as defined and allowed by NMAC 19.15.16.7B(1), NMAC

19.15.16.14B(2), NMAC 19.15.16.15B(2). Kimbeto Wash Unit Order Number is R-14084.

FINISH WELL: ND BOP. RDMO Drilling Rig.

COMPLETION AND PRODUCTION PLAN:

Frac: 35 plug-and-perf stages with 140,000 bbls slickwater fluid and 11,500,000 lbs of proppant (estimated)

Flowback: Flow back through production tubing as pressures allow (ESP may be used for load recovery assitance)

Production: Produce through production tubing via gas-lift into permanent production and storage facilities

ESTIMATED START DATES:

Drilling:

7/1/2019

Completion:

8/15/2019

Production:

9/14/2019

Prepared by:

Alec Bridge

5/6/2019

Updated by:

Alec Bridge

5/13/2019 - updated AFE information



Enduring Resources LLC

Directional Drilling Plan Plan View & Section View

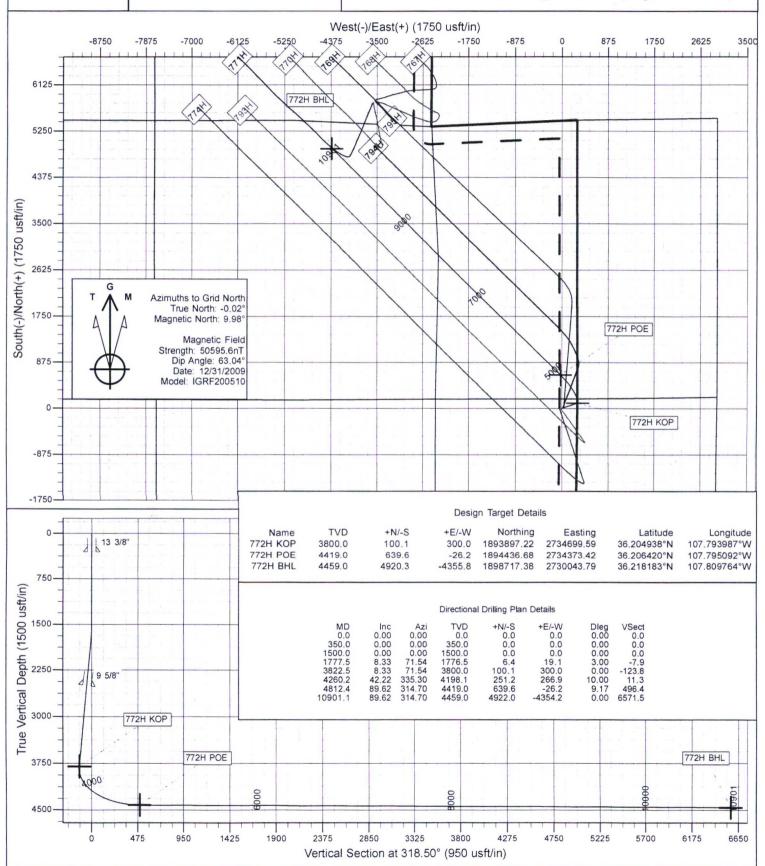
Kimbeto Wash Unit 772H

San Juan County, New Mexico T23N-R09W-Sec.28-Lot C Surface Latitude: 36.204663°N

Surface Longitude: 107.795004°W

Ground Level: 6534.0

Reference Elevation: KB @ 6562.0usft (Original Well Elev)





Enduring Resources LLC

San Juan Basin - Kimbeto Wash Unit 736H Pad 772H

Wellbore #1

Plan: Design #1

Standard Planning Report

03 May, 2019



Database: Company: **EDM**

Enduring Resources LLC

Project:

San Juan Basin - Kimbeto Wash Unit

Site: Well: 736H Pad 772H

Wellbore: Design:

Wellbore #1

Design #1

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference: **Survey Calculation Method:** Well 772H

KB @ 6562.0usft (Original Well Elev) KB @ 6562.0usft (Original Well Elev)

Minimum Curvature

Project

San Juan Basin - Kimbeto Wash Unit

Map System:

US State Plane 1983

Geo Datum: Map Zone:

North American Datum 1983 New Mexico Western Zone

System Datum:

Mean Sea Level

Site

736H Pad, San Juan County, New Mexico

Site Position:

Northing:

1,893,797.11 usft

Latitude:

36.204663°N

From:

Lat/Long

Easting:

2,734,399.63 usft

Longitude:

13-3/16 "

107.795004°W

Position Uncertainty:

0.0 usft Slot Radius:

Grid Convergence:

0.02

Well

772H

Well Position

+N/-S

0.0 usft

Northing:

1,893,797.11 usft

Latitude:

36.204663°N

+E/-W

0.0 usft

Easting:

2,734,399.63 usft

Longitude:

107.795004°W

Position Uncertainty

0.0 usft

Wellhead Elevation:

Ground Level:

6,534.0 usft

Wellbore

Wellbore #1

Magnetics

Model Name

Sample Date

Declination (°)

Dip Angle

Field Strength

(nT)

IGRF200510

12/31/2009

10.00

63.04

50,595.59906101

Design

Design #1

Audit Notes:

Version:

Phase:

PROTOTYPE

Tie On Depth:

0.0

Vertical Section:

Depth From (TVD) (usft)

0.0

+N/-S (usft) 0.0

+E/-W (usft)

0.0

Direction (°)

318.50

Plan Survey Tool Program

Depth From

0.0

Depth To

5/3/2019

Remarks

(usft)

(usft) Survey (Wellbore) 10,901.1 Design #1 (Wellbore #1)

Tool Name MWD

OWSG MWD - Standard

an Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
350.0	0.00	0.00	350.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,777.5	8.33	71.54	1,776.5	6.4	19.1	3.00	3.00	0.00	71.54	
3,822.5	8.33	71.54	3,800.0	100.1	300.0	0.00	0.00	0.00	0.00	772H KOP
4,260.2	42.22	335.30	4,198.1	251.2	266.9	10.00	7.74	-21.99	-105.04	
4,812.4	89.62	314.70	4,419.0	639.6	-26.2	9.17	8.58	-3.73	-27.06	772H POE
10,901.1	89.62	314.70	4,459.0	4,922.0	-4,354.2	0.00	0.00	0.00	0.00	772H BHL



Database: Company: EDM

Enduring Resources LLC

Project: Site: San Juan Basin - Kimbeto Wash Unit

736H Pag

Well: Wellbore: Design: 772H Wellbore #1

736H Pa

Wellbore #1

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Well 772H

KB @ 6562.0usft (Original Well Elev) KB @ 6562.0usft (Original Well Elev)

Grid

Measured			Vertical			Vertical	Dogleg	Build	Turn	
Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Section (usft)	Rate (°/100usft)	Rate (°/100usft)	Rate (°/100usft)	
				The state of the s	Service Street Services	A CAMBRIDAY OF STREET		中国 1990年 199	A THE PERSON OF THE	
0.0 74.0	0.00	0.00	0.0 74.0	0.0	0.0	0.0	0.00	0.00	0.00	
	0.00	0.00	74.0	0.0	0.0	0.0	0.00	0.00	0.00	
Ojo Alamo 100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00	
171.0	0.00	0.00	171.0	0.0	0.0	0.0	0.00	0.00	0.00	
Kirtland	0.00	0.00	171.0	0.0	0.0	0.0	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	
13 3/8"										
350.0	0.00	0.00	350.0	0.0	0.0	0.0	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	
431.0	0.00	0.00	431.0	0.0	0.0	0.0	0.00	0.00	0.00	
Fruitland										
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00	
781.0	0.00	0.00	781.0	0.0	0.0	0.0	0.00	0.00	0.00	
Pictured CI	iffs									
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00	
0000	0.00	0.00	202.2	0.0	0.0	0.0	0.00			
986.0	0.00	0.00	986.0	0.0	0.0	0.0	0.00	0.00	0.00	
Lewis										
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,171.0	0.00	0.00	1,171.0	0.0	0.0	0.0	0.00	0.00	0.00	
Chacra	0.00	0.00	4 200 0	0.0	0.0	0.0	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,600.0	3.00	71.54	1,600.0	0.8	2.5	-1.0	3.00	3.00	0.00	
1,700.0	6.00	71.54	1,699.6	3.3	9.9	-4.1	3.00	3.00	0.00	
1,777.5	8.33	71.54	1,776.5	6.4	19.1	-7.9	3.00	3.00	0.00	
1,800.0	8.33	71.54	1,798.8	7.4	22.2	-9.2	0.00	0.00	0.00	
1,900.0	8.33	71.54	1,897.7	12.0	35.9	-14.8	0.00	0.00	0.00	
2,000.0	8.33	71.54	1,996.7	16.6	49.6	-20.5	0.00	0.00	0.00	
2,100.0	8.33	71.54	2,095.6	21.2	63.4	-26.2	0.00	0.00	0.00	
2,181.2	8.33	71.54	2,176.0	24.9	74.5	-30.8	0.00	0.00	0.00	
Cliff House								V-0		
2,196.4	8.33	71.54	2,191.0	25.6	76.6	-31.6	0.00	0.00	0.00	
Menefee			-1.1							
2,200.0	8.33	71.54	2,194.6	25.7	77.1	-31.8	0.00	0.00	0.00	
2,300.0	8.33	71.54	2,293.5	30.3	90.9	-37.5	0.00	0.00	0.00	
2,400.0	8.33	71.54	2,392.5	34.9	104.6	-43.2	0.00	0.00	0.00	
2,500.0	8.33	71.54	2,491.4	39.5	118.3	-48.8	0.00	0.00	0.00	
2,508.7	8.33	71.54	2,500.0	39.9	119.5	-49.3	0.00	0.00	0.00	
9 5/8"										
2,600.0	8.33	71.54	2,590.4	44.1	132.1	-54.5	0.00	0.00	0.00	
2,700.0	8.33	71.54	2,689.3	48.7	145.8	-60.2	0.00	0.00	0.00	
2,800.0	8.33	71.54	2,788.2	53.2	159.5	-65.8	0.00	0.00	0.00	
2,900.0	8.33	71.54	2,887.2	57.8	173.3	-71.5	0.00	0.00	0.00	
3,000.0	8.33	71.54	2,986.1	62.4	187.0	-77.2	0.00	0.00	0.00	
3,100.0	8.33	71.54	3,085.1	67.0	200.7	-82.8	0.00	0.00	0.00	



Database: Company: EDM

Enduring Resources LLC

Project: Site: San Juan Basin - Kimbeto Wash Unit

736H Pad

Well: Wellbore: Design: 772H Wellbore #1 Design #1 Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Well 772H

KB @ 6562.0usft (Original Well Elev) KB @ 6562.0usft (Original Well Elev)

Grid

P	lann	ed	Sur	ve
---	------	----	-----	----

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
3,196.9	8.33	71.54	3,181.0	71.4	214.0	-88.3	0.00	0.00	0.00
Point Look	out								
3,200.0	8.33	71.54	3,184.0	71.6	214.5	-88.5	0.00	0.00	0.00
3,300.0	8.33	71.54	3,283.0	76.2	228.2	-94.2	0.00	0.00	0.00
3,400.0	8.33	71.54	3,381.9	80.7	241.9	-99.8	0.00	0.00	0.00
3,475.9	8.33	71.54	3,457.0	84.2	252.3	-104.1	0.00	0.00	0.00
Mancos								*	
3,500.0	8.33	71.54	3,480.9	85.3	255.7	-105.5	0.00	0.00	0.00
3,600.0	8.33	71.54	3,579.8	89.9	269.4	-111.2	0.00	0.00	0.00
3,700.0	8.33	71.54	3,678.8	94.5	283.1	-116.8	0.00	0.00	0.00
3,704.3	8.33	71.54	3,683.0	94.7	283.7	-117.1	0.00	0.00	0.00
Gallup (MN									
3,800.0	8.33	71.54	3,777.7	99.1	296.9	-122.5	0.00	0.00	0.00
3,819.5	8.33	71.54	3,797.0	100.0	299.5	-123.6	0.00	0.00	0.00
MNCS_B								-	
3,822.5	8.33	71.54	3,800.0	100.1	300.0	-123.8	0.00	0.00	0.00
3,900.0	9.77	21.44	3,876.6	108.0	307.7	-123.0	10.00	1.86	-64.67
3,938.1	12.33	6.59	3,914.0	115.1	309.3	-118.8	10.00	6.72	-39.00
MNCS_Cms			-,					2	55.50
4,000.0	17.48	352.99	3,973.8	130.9	309.0	-106.7	10.00	8.32	-21.97
4,075.1	24.37	344.51	4,044.0	157.1	303.4	-83.4	10.00	9.18	-11.29
MNCS_D	24.57	344.51	4,044.0	137.1	303.4	-03.4	10.00	3.10	-11.23
4,100.0	26.72	342.63	4,066.4	167.3	300.4	-73.7	10.00	9.46	-7.53
4,200.0	36.35	337.41	4,151.6	216.3	282.3	-25.0	10.00	9.63	-5.23
4,234.8	39.75	336.12	4,179.0	236.0	273.8	-4.6	10.00	9.74	-3.69
MNCS_E	40.00	225 20	4 100 1	254.2	266.0	11.2	10.00	0.77	2.25
4,260.2	42.22	335.30	4,198.1	251.2	266.9	11.3	10.00	9.77	-3.25
4,300.0	45.50	332.97	4,226.8	276.0	254.9	37.8	9.17	8.23	-5.85
4,326.4 MNCS_F	47.70	331.56	4,245.0	293.0	246.0	56.5	9.17	8.32	-5.32
_									
4,400.0	53.90	328.12	4,291.5	342.2	217.3	112.3	9.17	8.43	-4.69
4,434.3	56.82	326.69	4,311.0	366.0	202.0	140.2	9.17	8.52	-4.15
MNCS_G	00.40	201.00	40440	4100	1000	100 5	0.47	0.50	0.77
4,500.0	62.46	324.22	4,344.2	412.6	169.9	196.5	9.17	8.58	-3.77
4,536.1	65.57	322.96	4,360.0	438.7	150.6	228.8	9.17	8.63	-3.47
MNCS_H	74.41	200.00	4 000 0	105.1	44.6	222.5	0.47	0.00	25-
4,600.0	71.11	320.89	4,383.6	485.4	114.0	288.0	9.17	8.66	-3.25
4,646.2	75.13	319.47	4,397.0	519.4	85.7	332.3	9.17	8.69	-3.06
MNCS_I	1000						100		
4,700.0	79.81	317.88	4,408.7	558.8	51.0	384.7	9.17	8.71	-2.95
4,800.0	88.54	315.05	4,418.8	630.8	-17.4	484.0	9.17	8.73	-2.84
4,812.4	89.62	314.70	4,419.0	639.6	-26.2	496.4	9.17	8.74	-2.81
4,900.0	89.62	314.70	4,419.6	701.2	-88.5	583.8	0.00	0.00	0.00
5,000.0	89.62	314.70	4,420.2	771.5	-159.6	683.6	0.00	0.00	0.00
5,100.0	89.62	314.70	4,420.9	841.9	-230.6	783.4	0.00	0.00	0.00
5,200.0	89.62	314.70	4,421.5	912.2	-301.7	883.1	0.00	0.00	0.00
5,300.0	89.62	314.70	4,422.2	982.5	-372.8	982.9	0.00	0.00	0.00
5,400.0	89.62	314.70	4,422.9	1,052.9	-443.9	1,082.7	0.00	0.00	0.00
5,500.0	89.62	314.70	4,423.5	1,123.2	-515.0	1,182.5	0.00	0.00	0.00
5,600.0	89.62	314.70	4,424.2	1,193.5	-586.1	1,282.2	0.00	0.00	0.00
5,700.0	89.62	314.70	4,424.8	1,263.9	-657.1	1,382.0	0.00	0.00	0.00
5,800.0	89.62	314.70	4,425.5	1,334.2	-728.2	1,481.8	0.00	0.00	0.00
5,900.0	89.62	314.70	4,426.1	1,404.5	-799.3	1,581.6	0.00	0.00	0.00



Database: Company: EDM

Enduring Resources LLC

Project: Site: San Juan Basin - Kimbeto Wash Unit

736H Pad

Well: Wellbore: 772H Wellbore #1

Wellbore: Design;

Design #1

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Well 772H

KB @ 6562.0usft (Original Well Elev) KB @ 6562.0usft (Original Well Elev)

Grid

resign.	Design #1			1.177.705.170	Who will have been the conference of	CAMEND SERVING	the man of the same		
Planned Survey			signalist and L			r sa Silata		. 3.38.22.32	
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
6,000.0	89.62	314.70	4,426.8	1,474.9	-870.4	1,681.4	0.00	0.00	0.00
6,100.0	89.62	314.70	4,427.5	1,545.2	-941.5	1,781.1	0.00	0.00	0.00
6,200.0	89.62	314.70	4,428.1	1,615.5	-1,012.5	1,880.9	0.00	0.00	0.00
6,300.0	89.62	314.70	4,428.8	1,685.9	-1,083.6	1,980.7	0.00	0.00	0.00
6,400.0	89.62	314.70	4,429.4	1,756.2	-1,154.7	2,080.5	0.00	0.00	0.00
6,500.0	89.62	314.70	4,430.1	1,826.5	-1,225.8	2,180.2	0.00	0.00	0.00
6,600.0	89.62	314.70	4,430.7	1,896.9	-1,296.9	2,280.0	0.00	0.00	0.00
6,700.0	89.62	314.70	4,431.4	1,967.2	-1,368.0	2,379.8	0.00	0.00	0.00
6,800.0	89.62	314.70	4,432.1	2,037.5	-1,439.0	2,479.6	0.00	0.00	0.00
6,900.0	89.62	314.70	4,432.7	2,107.9	-1,510.1	2,579.4	0.00	0.00	0.00
7,000.0	89.62	314.70	4,433.4	2,178.2	-1,581.2	2,679.1	0.00	0.00	0.00
7,100.0	89.62	314.70	4,434.0	2,248.5	-1,652.3	2,778.9	0.00	0.00	0.00
7,200.0	89.62	314.70	4,434.7	2,318.9	-1,723.4	2,878.7	0.00	0.00	0.00
7,300.0	89.62	314.70	4,435.3	2,389.2	-1,794.4	2,978.5	0.00	0.00	0.00
7,400.0	89.62	314.70	4,436.0	2,459.5	-1,865.5	3,078.2	0.00	0.00	0.00
7,500.0	89.62	314.70	4,436.7	2,529.9	-1,936.6	3,178.0	0.00	0.00	0.00
7,600.0	89.62	314.70	4,437.3	2,600.2	-2,007.7	3,277.8	0.00	0.00	0.00
7,700.0	89.62	314.70	4,438.0	2,670.5	-2,078.8	3,377.6	0.00	0.00	0.00
7,800.0	89.62	314.70	4,438.6	2,740.9	-2,149.9	3,477.3	0.00	0.00	0.00
7,900.0	89.62	314.70	4,439.3	2,811.2	-2,220.9	3,577.1	0.00	0.00	0.00
8,000.0	89.62	314.70	4,439.9	2,881.5	-2,292.0	3,676.9	0.00	0.00	0.00
8,100.0	89.62	314.70	4,440.6	2,951.9	-2,363.1	3,776.7	0.00	0.00	0.00
8,200.0	89.62	314.70	4,441.3	3,022.2	-2,434.2	3,876.5	0.00	0.00	0.00
8,300.0	89.62	314.70	4,441.9	3,092.6	-2,505.3	3,976.2	0.00	0.00	0.00
8,400.0	89.62	314.70	4,442.6	3,162.9	-2,576.3	4,076.0	0.00	0.00	0.00
8,500.0	89.62	314.70	4,443.2	3,233.2	-2,647.4	4,175.8	0.00	0.00	0.00
8,600.0	89.62	314.70	4,443.9	3,303.6	-2,718.5	4,275.6	0.00	0.00	0.00
8,700.0	89.62	314.70	4,444.5	3,373.9	-2,789.6	4,375.3	0.00	0.00	0.00
8,800.0	89.62	314.70	4,445.2	3,444.2	-2,860.7	4,475.1	0.00	0.00	0.00
8,900.0	89.62	314.70	4,445.9	3,514.6	-2,931.8	4,574.9	0.00	0.00	0.00
9,000.0	89.62	314.70	4,446.5	3,584.9	-3,002.8	4,674.7	0.00	0.00	0.00
9,100.0	89.62	314.70	4,447.2	3,655.2	-3,073.9	4,774.5	0.00	0.00	0.00
9,200.0	89.62	314.70	4,447.8	3,725.6	-3,145.0	4,874.2	0.00	0.00	0.00
9,300.0	89.62	314.70	4,448.5	3,795.9	-3,216.1	4,974.0	0.00	0.00	0.00
9,400.0	89.62	314.70	4,449.1	3,866.2	-3,287.2	5,073.8	0.00	0.00	0.00
9,500.0	89.62	314.70	4,449.8	3,936.6	-3,358.3	5,173.6	0.00	0.00	0.00
9,600.0	89.62	314.70	4,450.5	4,006.9	-3,429.3	5,273.3	0.00	0.00	0.00
9,700.0	89.62	314.70	4,451.1	4,077.2	-3,500.4	5,373.1	0.00	0.00	0.00
9,800.0	89.62	314.70	4,451.8	4,147.6	-3,571.5	5,472.9	0.00	0.00	0.00
9,900.0	89.62	314.70	4,452.4	4,217.9	-3,642.6	5,572.7	0.00	0.00	0.00
10,000.0	89.62	314.70	4,453.1	4,288.2	-3,713.7	5,672.4	0.00	0.00	0.00
10,100.0	89.62	314.70	4,453.7	4,358.6	-3,784.7	5,772.2	0.00	0.00	0.00
10,200.0	89.62	314.70	4,454.4	4,428.9	-3,855.8	5,872.0	0.00	0.00	0.00
10,300.0	89.62	314.70	4,455.1	4,499.2	-3,926.9	5,971.8	0.00	0.00	0.00
10,400.0	89.62	314.70	4,455.7	4,569.6	-3,998.0	6,071.6	0.00	0.00	0.00
10,500.0	89.62	314.70	4,456.4	4,639.9	-4,069.1	6,171.3	0.00	0.00	0.00
10,600.0	89.62	314.70	4,457.0	4,639.9	-4,140.2	6,271.1	0.00	0.00	0.00
10,700.0	89.62	314.70	4,457.7	4,710.2	-4,140.2	6,370.9	0.00	0.00	0.00
10,800.0	89.62	314.70	4,458.3	4,850.9	-4,211.2	6,470.7	0.00	0.00	0.00
10,900.0	89.62	314.70	4,459.0	4,921.2	-4,353.4	6,570.4	0.00	0.00	0.00
10,901.1									
	89.62	314.70	4,459.0	4,922.0	-4,354.2	6,571.5	0.00	0.00	0.00



Database: Company:

Enduring Resources LLC

Project:

Design:

San Juan Basin - Kimbeto Wash Unit

Site: Well: Wellbore: 736H Pad 772H Wellbore #1

Design #1

EDM

Local Co-ordinate Reference:

Well 772H

TVD Reference: MD Reference:

KB @ 6562.0usft (Original Well Elev) KB @ 6562.0usft (Original Well Elev)

North Reference:

Survey Calculation Method:

Design Targets		Charles Visite							
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude _i	Longitude
772H KOP - plan hits target ce - Point	0.00 enter	359.98	3,800.0	100.1	300.0	1,893,897.23	2,734,699.60	36.204938°N	107.793987°W
772H POE - plan hits target ce - Point	0.00 enter	359.98	4,419.0	639.6	-26.2	1,894,436.68	2,734,373.42	36.206420°N	107.795092°W
772H BHL - plan misses targe - Point	0.00 et center by 2.4u	359.99 usft at 10901	4,459.0 .1usft MD (44	4,920.3 459.0 TVD, 49	-4,355.8 922.0 N, -4354	1,898,717.39 4.2 E)	2,730,043.79	36.218183°N	107.809765°W

Casing Points							
	Measured Depth (usft)	Vertical Depth (usft)		Name	Casing Diameter (")	Hole Diameter (")	
	300.0	300.0	13 3/8"		13-3/8	17-1/2	
	2,508.7	2,500.0	9 5/8"		9-5/8	12-1/4	

Formations				
	Measured Depth (usft)	Vertical Depth (usft)	Name	Dip Dip Direction Lithology (°) (°)
	74.0	74.0	Ojo Alamo	0.00
	171.0	171.0	Kirtland	0.00
	431.0	431.0	Fruitland	0.00
	781.0	781.0	Pictured Cliffs	0.00
	986.0	986.0	Lewis	0.00
	1,171.0	1,171.0	Chacra	0.00
	2,181.2	2,176.0	Cliff House	0.00
	2,196.4	2,191.0	Menefee	0.00
	3,196.9	3,181.0	Point Lookout	0.00
	3,475.9	3,457.0	Mancos	0.00
	3,704.3	3,683.0	Gallup (MNCS_A)	0.00
	3,819.5	3,797.0	MNCS_B	0.00
	3,938.1	3,914.0	MNCS_Cms	0.00
	4,075.1	4,044.0	MNCS_D	0.00
	4,234.8	4,179.0	MNCS_E	0.00
	4,326.4	4,245.0	MNCS_F	0.00
	4,434.3	4,311.0	MNCS_G	0.00
	4,536.1	4,360.0	MNCS_H	0.00
	4,646.2	4,397.0	MNCS_I	0.00

WELL NAME: KIMBETO WASH UNIT 772H

OBJECTIVE: Drill, complete, and equip single lateral in the Mancos-I formation

API Number: 30-045-35825

State: New Mexico

Surface Location: 28-23N-09W Sec-Twn- Rng

BH Location: 20-23N-09W Sec-Twn- Rng

County: San Juan

Surface Elev.: 6,534

ft ASL (GL)

736H Pad (Wells: KWU 772H, 774H, 793H, 794H, 795H).

181 500

ft FNL ft FNL

ft ASL (KB)

2,377

ft FWL 1928 ft FEL

Driving Directions: FROM THE INTERSECTION OF US HWY 550 & US HWY 64 IN BLOOMFIELD, NM: South on US Hwy 550 for 37.8 miles to MM 113.4; Right (SW) on CR 7890 for 0.8 miles to fork; Left (S) remaining on 7890 for 1.3 miles to 4-way intersection; Left (SE) on 7890 for 0.6 miles to fork; Right (SW) remaining on 7890 for 0.5 miles; Right (W) on access road for W Lybrook Unit 720H location for 0.6 miles to fork; Left (W) on access road for W Lybrook Unit 726H location for 0.7 miles to fork; Left (W) on access road for W Lybrook Unit 730H location for 1.9 miles; Right (N) on access road for 0.4 miles to Kimbeto Wash Unit

QUIC	QUICK REFERENCE											
Sur TD (MD)	300	ft										
Int TD (MD)	2,509	ft										
KOP (MD)	3,823	ft										
KOP (TVD)	3,800	ft										
Target (TVD)	4,419											
Curve BUR	10	°/100 ft										
POE (MD)	4,812	ft										
TD (MD)	10,901	ft										
Lat Len (ft)	6,089	ft										

WELL CONSTRUCTION SUMMARY:

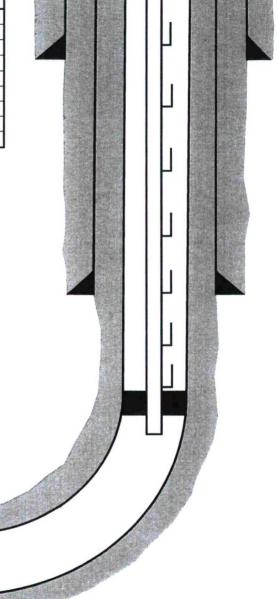
	Hole (in)	TD MD (ft)	Csg (in)	Csg (lb/ft)	Csg (grade)	Csg (conn)	Csg Top (ft)	Csg Bot (ft)
Surface	17.500	300	13.375	54.5	J-55	BTC	0	300
Intermediate	12.250	2,509	9.625	36.0	J-55	LTC	0	2,509
Production	8.500	10,901	5.500	17.0	P-110	LTC	0	10,901

CEMENT PROPERTIES SUMMARY:

	Туре	Wt (ppg)	Yd (cuft/sk)	Wtr (gal/sk)	Hole Cap. (cuft/ft)	% Excess	TOC (ft MD)	Total (sx)
Surface	Class G	15.8	1.18	5.24	0.6946	100%	0	353
Inter. (Lead)	G:POZ Blend	12.3	1.96	10.12	0.3627	70%	0	559
Inter. (Tail)	Class G	15.8	1.148	4.98	0.3132	20%	2,009	164
Prod. (Lead)	G:POZ blend	12.3	1.960	10.11	0.2691	50%	0	726
Prod. (Tail)	G:POZ blend	13.3	1.354	5.94	0.2291	10%	3,704	1,339

COMPLETION / PRODUCTION SUMMARY:

Frac: 35 plug-and-perf stages with 140,000 bbls slickwater fluid and 11,500,000 lbs of proppant (estimated) Flowback: Flow back through production tubing as pressures allow (ESP may be used for load recovery assitance) Production: Produce through production tubing via gas-lift into permanent production and storage facilities



Directions from the Intersection of US Hwy 550 & US Hwy 64

in Bloomfield, NM to Enduring Resources, LLC Kimbeto Wash Unit #772H

181' FNL & 2377' FWL, Section 28, T23N, R9W, N.M.P.M., San Juan County, NM

Latitude: 36.204663°N Longitude: 107.795004°W Datum: NAD1983

From the intersection of US Hwy 550 & US Hwy 64 in Bloomfield, NM, travel Southerly on US Hwy 550 for 37.8 miles to Mile Marker 113.4;

Go Right (South-westerly) on County Road #7890 for 0.8 miles to fork in roadway;

Go Left (Southerly) remaining on County Road #7890 for 1.3 miles to four-way intersection;

Go Left (South-easterly) remaining on County Road #7890 for 0.6 miles to fork in roadway;

Go Right (South-westerly) remaining on County Road #7890 for 0.5 miles to begin Enduring W Lybrook Unit #720H existing access on right-hand side of County Road;

Go Right (Westerly) exiting County Road #7890 onto Enduring W Lybrook Unit #720H existing access for 0.6 miles to fork in roadway;

Go Left (Westerly) which is straight, onto Enduring W Lybrook Unit #726H existing access for 0.7 miles to fork in roadway;

Go Left (Westerly) which is straight, onto Enduring W Lybrook Unit #730H existing access for 1.9 miles to proposed access on right-hand side of roadway which continues for 2093.2' to staked Enduring Kimbeto Wash Unit #772H location.