

District I (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II (575) 748-1283
811 S. First St., Artesia, NM 88210
District III (505) 334-6178
1000 Rio Brazos Road, Aztec, NM 87410
District IV (505) 827-8198
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-106
Revised August 1, 2011

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

3-37
ACT Permit No.

NOTICE OF INTENTION TO UTILIZE AUTOMATIC CUSTODY TRANSFER EQUIPMENT

Operator LOGOS Operating, LLC

Address 2010 Afton Place, Farmington, NM 87401 County San Juan

Lease(s) to be served by this ACT Unit Federal Lease NMNM138467

Pool(s) to be served by this ACT Unit Basin Mancos (97232) Lybrook Gallup (42289)

Location of ACT System: Unit P Section 7 Township 23N Range 07W

Order No. authorizing commingling between leases if more than one lease is to be served by this system.

N/A Date _____

Order No. authorizing commingling between pools if more than one pool is to be served by this system

N/A Date _____

Authorized transporter of oil from this system Whiptail Midstream, LLC

Transporter's address 15 West 6th Street, Tulsa, OK 74119

Maximum expected daily through-put for this system: 1365 BBL/Day

If system fails to transfer oil due to malfunction or otherwise, waste by overflow will be averted by:

CHECK ONE: A. Automatic shut-down facilities B. Providing adequate available capacity to receive production
as required by 19.15.18.15.C(8) NMAC during maximum unattended time of lease operation
19.15.18.15.C(9) NMAC

If "A" above is checked, will flowing wells be shut-in at the header manifold or at the wellhead?

_____ Maximum well-head shut-in pressure _____

If "B" above is checked, how much storage capacity is available above the normal high working level of the

surge tank 3600 BBLs.

What is the normal maximum unattended time of lease operation? Sixteen (16) Hours.

What device will be used for measuring oil in this ACT unit?

CHECK ONE: Positive displacement meter Weir-type measuring vessel
 Positive volume metering chamber Other; describe Coriolis Meter

Remarks: This LACT will be selling to pipeline.

OPERATOR:
I hereby certify above information is true and complete to best of my knowledge and subject ACT system will be installed and operated in accordance with Rule 19.15.18.15 NMAC. Approval of this Form C-106 does not eliminate necessity of an approved C-104 prior to running any oil or gas from this system.
Signature Tamra Sessions
Printed Name & Title Tamra Sessions
Email Address tsessions@logosresourcesllc.com
Date 10/22/18 Telephone 505-324-4145

OIL CONSERVATION DIVISION
Approved by: Brandon Randall
Title: Deputy Oil & Gas Inspector, District #3
Date: 11/8/18

INSTRUCTIONS: Submit one copy of Form C-106 with following attachments to appropriate district office.

- 1) Lease plat showing all wells which will be produced in ACT system.
- 2) Schematic diagram of battery and ACT equipment showing all major components and means employed to prove accuracy of measuring device.
- 3) Letter from transporter agreeing to utilization of ACT system as shown on schematic diagram.

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**NOTICE OF INTENTION TO UTILIZE CUSTODY TRANSFER EQUIPMENT
FEDERAL 2307 7P COM PIPELINE LACT UNIT**

WELLS TO BE SERVED BY PIPELINE LACT UNIT:

FEDERAL 2307 7P COM 1H / API 30-039-31366 / UNIT P (SE/SE), SEC 7, T23N-R7W, NMPM

FEDERAL 2307 7P COM 2H / API 30-039-31367 / UNIT P (SE/SE), SEC 7, T23N-R7W, NMPM

FEDERAL 2307 7P COM 3H / API 30-039-31368 / UNIT P (SE/SE), SEC 7, T23N-R7W, NMPM

19.15.18.15 AUTOMATIC CUSTODY TRANSFER EQUIPMENT:

A. Oil shall be received and measured in facilities of an approved design. The facilities shall permit the testing of each well at reasonable intervals and may be comprised of manually gauged, closed stock tanks for which the operator of the ACT system has prepared proper strapping tables, or of ACT equipment. The division shall permit ACT equipment's use only after the operator complies with the following. The operator shall file with the division form C-106 and receive approval for use of the ACT equipment prior to transferring oil through the ACT system. The carrier shall not accept delivery of oil through the ACT system until the division has approved form C-106.

- *See flow process diagram attached.*

B. The operator of the ACT system shall submit form C-106 to the appropriate division district office, which is accompanied by the following:

- (1) plat of the lease showing all wells that the any well operator will produce into the ACT system;
 - *Attached as part of Form C-106 Notice of Intent.*
- (2) schematic diagram of the ACT equipment, showing on the diagram all major components such as surge tanks and their capacity, extra storage tanks and their capacity, transfer pumps, monitors, reroute valves, treaters, samplers, strainers, air and gas eliminators, back pressure valves and metering devices (indicating type and capacity, *i.e.* whether automatic measuring tank, positive volume metering chamber, weir-type measuring vessel or positive displacement meter); the schematic diagram shall also show means employed to prove the measuring device's accuracy; and
 - *Attached as part of Form C-106 Notice of Intent.*
- (3) letter from transporter agreeing to utilization of ACT system as shown on schematic diagram.
 - *Attached as part of Form C-106 Notice of Intent.*

C. The division shall not approve form C-106 unless the operator of the ACT system will install and operate the ACT system in compliance with the following requirements.

- (1) Provision is made for accurate determination and recording of uncorrected volume and applicable temperature, or of temperature corrected volume. The system's overall accuracy shall equal or surpass manual methods.
 - *The LACT system is more accurate when compared to manual tank. It is proved per BLM Onshore Order #4 Measurement of Oil and API MPMS Chapter 4 Proving Systems; with a volumetric prover that meets the requirements set forth in Onshore Order #4. The LACT also has a temperature RTD which will be calibrated semi-annually, unless more frequent verification is requested by the division.*
- (2) Provision is made for representative sampling of the oil transferred for determination of API gravity and BS&W content.
 - *The LACT is equipped with a flow proportional sampler (sample probe and actuated valve). The sampled fluid is stored in a sealed cylinder that is used for API gravity and S&W determination.*
- (3) Provision is made if required by either the oil's producer or the transporter to give adequate assurance that the ACT system runs only merchantable oil.
 - *The LACT is equipped with a water cut analyzer that communicated with the flow computer. When the S&W set point is reached the divert valve will engage sending non-merchantable oil to a divert tank. The set point can be adjusted in the flow computer but only if agreed upon by both shipper and producer.*
- (4) Provision is made for set-stop counters to stop the flow of oil through the ACT system at or prior to the time the allowable has been run. Counters shall provide non-reset totalizers that are visible for inspection at all times.
 - *The Coriolis meter has a non-resettable totalizer which is always visibly available on the LCD display.*
- (5) Necessary controls and equipment are enclosed and sealed, or otherwise arranged to provide assurance against, or evidence of, accidental or purposeful mismeasurement resulting from tampering.
 - *Required ports are sealed and tracked in the seal log.*

- (6) The ACT system's components are properly sized to ensure operation within the range of their established ratings. All system components that require periodic calibration or inspection for proof of continued accuracy are readily accessible; the frequency and methods of the calibration or inspection shall be as set forth in Paragraph (12) of Subsection C of 19.15.18.15 NMAC.
- *The Coriolis is proved per BLM Onshore Order #4 Measurement of Oil and API MPMS Chapter 4 Proving Systems; with a volumetric prover that meets the requirements set forth in Onshore Order #4. The prover is NIST traceable and water drawn on a bi-annual basis. Proving will be consistent with Onshore Order #4, unless a variance is granted by the Division. NMOCD representatives are sent the schedule to witness if desired. The temperature transmitter is verified on a semi-annual basis, unless more frequent verification is requested by the Division. The water cut analyzer is calibrated as needed.*
- (7) The control and recording system includes adequate fail-safe features that provide assurance against mismeasurement in the event of power failure, or the failure of the ACT system's component parts.
- *In the event of power failure, the divert valve mechanically goes to "failed state" and no longer sales oil but only sends it to the divert tank.*
 - *All of the historized volume data is stored in the flow computer memory with battery backup and is also transmitted by SCADA, multiple times a day, to an office server. So even during a power failure no oil volume is lost.*
 - *In the event of a malfunction, the LACT unit is programmed to shut off and the divert valve is forced to close and no longer sales oil but only sends it to the divert tank. The malfunction is also logged by the flow computer.*
- (8) The ACT system and allied facilities include fail-safe equipment as may be necessary, including high level switches in the surge tank or overflow storage tank that, in the event of power failure or malfunction of the ACT or other equipment, will shut down artificially lifted wells connected to the ACT system and will shut in flowing wells at the well-head or at the header manifold, in which latter case the operator of the ACT system shall pressure test all flowlines to at least 1½ times the maximum well-head shut-in pressure prior to the ACT system's initial use and every two years thereafter.
- *Hi level switches are in place and will shut the well in at the inlet to the production unit in the event of a full tank. Flow lines were tested to 1 ½ times shut in pressure at initial construction. Testing will commence every two years to ensure piping integrity.*
- (9) As an alternative to the requirements of Paragraph (8) of Subsection C of 19.15.18.15 NMAC the producer shall provide and at all times maintain a minimum of available storage capacity above the normal high working level of the surge tank to receive and hold the amount of oil that may be produced during maximum unattended time of lease operation.
- *N/A*
- (10) In all ACT systems employing automatic measuring tanks, weir-type measuring vessels, positive volume metering chambers or any other volume measuring container, the container and allied components shall be properly calibrated prior to initial use and shall be operated, maintained and inspected as necessary to ensure against incrustation, changes in clingage factors, valve leakage or other leakage and improper action of floats, level detectors, etc.
- *N/A (Coriolis Meter)*
- (11) In ACT systems employing positive displacement meters, the meter and allied components shall be properly calibrated prior to initial use and shall be operated, maintained and inspected as necessary to ensure against oil mismeasurement.
- *The Coriolis is proved per BLM Onshore Order #4 Measurement of Oil and API MPMS Chapter 4 Proving Systems; with a volumetric prover that meets the requirements set forth in Onshore Order #4. The prover is NIST traceable and water drawn on a bi-annual basis. Monthly proving will continue per the rule, unless a variance is granted by the Division. NMOCD representatives are sent the schedule to witness if desired. The temperature transmitter is verified on a semi-annual basis, unless more frequent verification is requested by the Division.*

(12) The operator of the ACT system shall check the measuring and recording devices of ACT systems for accuracy at least once each month unless it has obtained an exception to such determination from the division. Where applicable, the operator of the ACT system shall use API standard 1101, Measurement of Petroleum Hydrocarbons by Positive Displacement Meter. Meters may be proved against master meters, portable prover tanks or prover tanks permanently installed on the lease. If the operator of the ACT system uses permanently installed prover tanks, the distance between the opening and closing levels and the provision for determining the opening and closing readings shall be sufficient to detect variations of 5/100 of one percent. The operator of the ACT system shall file reports of determination on the division form entitled "meter test report" or on another acceptable form in duplicate with the appropriate division district office.

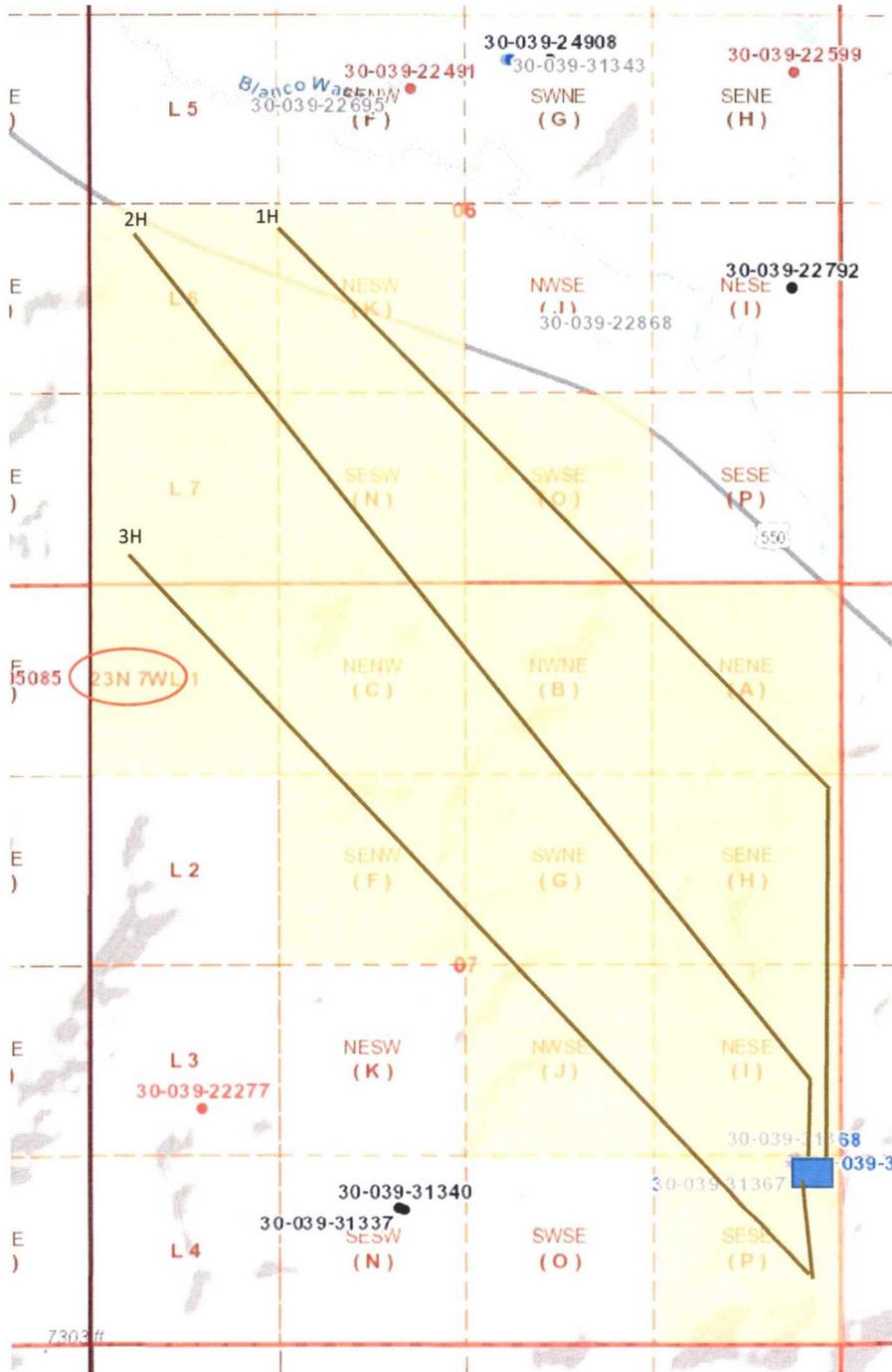
- ***The Coriolis is proved per BLM Onshore Order #4 Measurement of Oil and API MPMS Chapter 4 Proving Systems; with a volumetric prover that meets the requirements set forth in Onshore Order #4. The prover is NIST traceable and water drawn on a bi-annual basis. Monthly proving will continue per the rule, unless a variance is granted by the Division. NMOCD representatives are sent the schedule to witness if desired. The temperature transmitter is verified on a semi-annual basis, unless more frequent verification is requested by the Division.***

(13) To obtain an exception to the requirement in Paragraph (12) of Subsection C of 19.15.18.15 NMAC that all measuring and recording devices be checked for accuracy once each month, either the producer or transporter may file a request with the director setting forth facts pertinent to the exception. The application shall include a history of the average factors previously obtained, both tabulated and plotted on a graph of factors versus time, showing that the particular installation has experienced no erratic drift. The applicant shall also furnish evidence that the other interested party has agreed to the exception. The director may then set the frequency for determination of the system's accuracy at the interval which the director deems prudent.

- *N/A*

D. The division may revoke its approval of an ACT system's form C-106 if the system's operator fails to operate it in compliance with 19.15.18.15 NMAC.

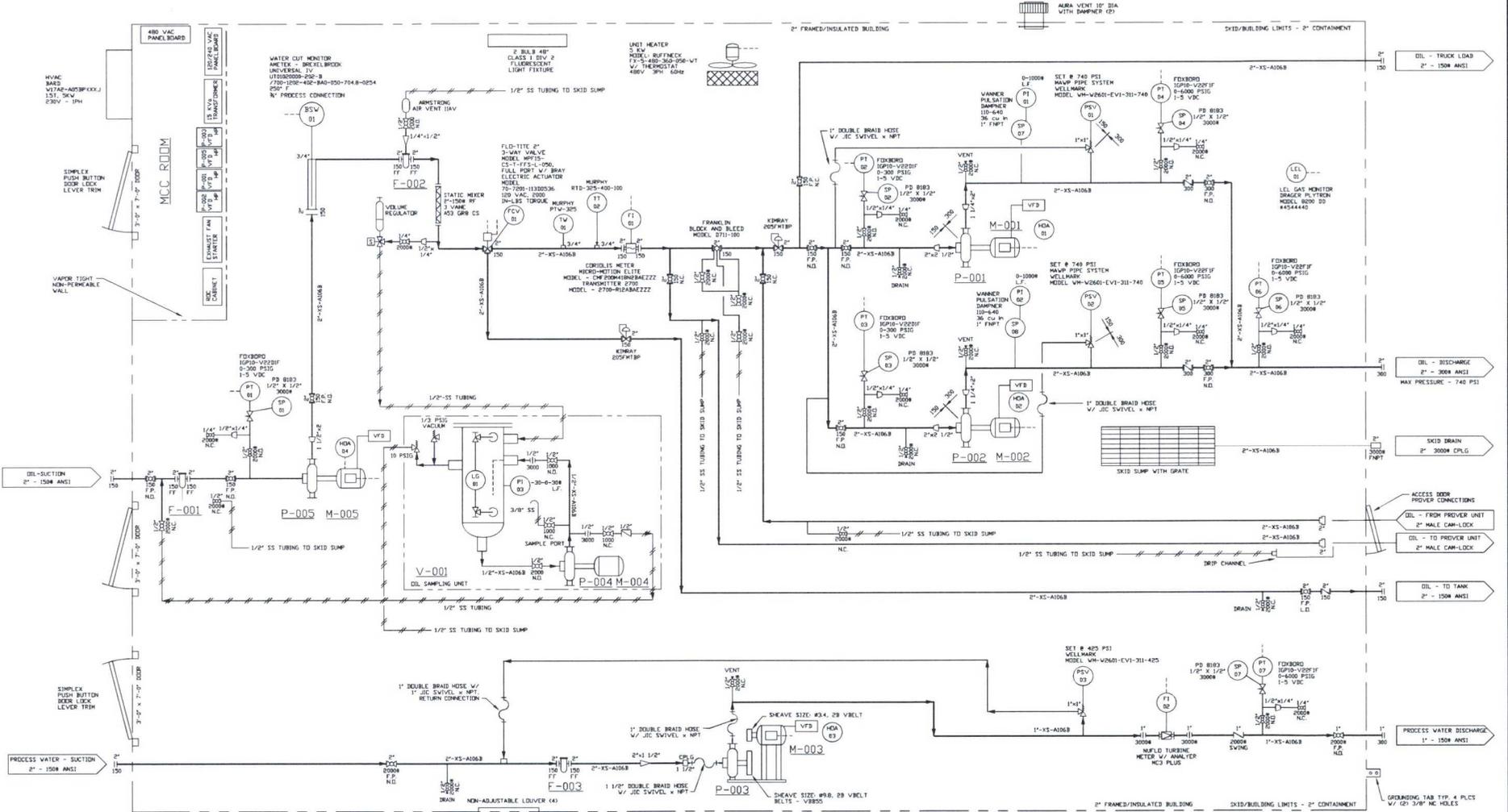
[19.15.18.15 NMAC - Rp, 19.15.5.309 NMAC, 12/1/08]



LOGOS OPERATING, LLC
 FEDERAL 2307 07P COM PAD
 Lease Plat Map
 Rio Arriba County, NM

- Well Pad w/LACT Equip
- Lateral
- Approved CA NMNM138467

- P-005** SERVICE CHARGE PUMP CAPACITY: 5 GPM DISCHARGE: 60 PSI MAX RPM: 1750 MODEL: GOALDS 375A, 1-1/2" x 2" B
- M-005** SERVICE ELECTRIC MOTOR 3PH, 460V, 10HP 1750 RPM 1/2" SHAFT FRAME: 145T BALCOB MODEL: D90737
- F-001** SERVICE OIL - BASKET STRAINER MODEL: STS20000AC 2" 1/2" FF FLANGE MAWP - 200 PSI @ 100' F 1/8" PERFORATED SS BASKET
- F-002** SERVICE OIL - STRAINER W/ VENT MODEL: BS-60000 2" 1/2" FF FLANGE MAWP - 200 PSI @ 100' F
- P-001** SERVICE OIL PUMP CAPACITY: 75 GPM DISCHARGE: 600 PSI MAX RPM: 1150 MODEL: HYDRA-CELL D35EX3THN6H
- M-001** SERVICE ELECTRIC MOTOR 3PH, 208/460V, 10HP 1200 RPM 1/2" SHAFT HYUNDAI MODEL: H015-12-284T
- P-002** SERVICE OIL PUMP CAPACITY: 75 GPM DISCHARGE: 600 PSI MAX RPM: 1150 MODEL: HYDRA-CELL D35EX3THN6H
- M-002** SERVICE ELECTRIC MOTOR 3PH, 208/460V, 10HP 1200 RPM 1/2" SHAFT HYUNDAI MODEL: H015-12-284T
- F-003** SERVICE WATER - BASKET STRAINER MODEL: STS20000AC 2" 1/2" FF FLANGE MAWP - 200 PSI @ 100' F 1/8" PERFORATED SS BASKET
- P-003** SERVICE WATER - HYDRACELL PUMP CAPACITY: 50 GPM DISCHARGE: 400 PSI OPERATING MAX RPM: 1050 MODEL: HDSX3HTECA
- M-003** SERVICE ELECTRIC MOTOR 3PH, 208/460V, 60HP 1050 RPM 3" SHAFT HYUNDAI MODEL: H015-12-2137
- P-004** SERVICE SAMPLE PUMP CAPACITY: 15 GAL DISCHARGE: 75 PSI MAX RPM: 3450 MODEL: 115/350V MOTOR 3/4" FRAME
- M-004** SERVICE SAMPLE MIXING TANK CAPACITY: 15 GAL BESTION PRESSURE: 35 PSI @ 1500' RPM: 115/350V MOTOR 3/4" FRAME
- V-001** SERVICE SAMPLE MIXING TANK CAPACITY: 15 GAL BESTION PRESSURE: 35 PSI @ 1500' RPM: 115/350V MOTOR 3/4" FRAME



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Drawn By:	JER
Date:	Jan 2017
Checked By:	
Date:	
Approved:	
Date:	
REV	DESCRIPTION
0	PRELIMINARY
1	
2	



Drawing Name:	P & ID	
Project:	WHITCAL 3 PUMP LACT W/ WATER TRANSFER	
Scale:	NTS	Drawing No.:
		Q17-16-01
		Rev:
		0

3440 Morning Star Drive, Farmington, NM 87401 (505) 327-0422

Tamra Sessions

From: Michael Bullock <michael.bullock@whiptailmidstream.com>
Sent: Friday, October 19, 2018 12:46 PM
To: Tamra Sessions; Ernie Johnson
Cc: Kelly Maxwell
Subject: RE: C-106 Letter from Transporter: LOGOS Federal 2307 7P Com pad

Tamra,

We approve the use of the Pipeline Transfer LACT equipment on the Federal 2307 7P Com well pad to transfer product from the wells below to Whiptail Midstream, LLC's pipeline system.

Federal 2307 7P PIPELINE LACT UNIT

WELLS TO BE SERVED BY PIPELINE LACT UNIT:

- Federal 2307 7P Com 1H / API #30-039-31366 / UNIT P (SE/SE) Sec. 7, T23N, R7W, NMPM
- Federal 2307 7P Com 2H / API #30-039-31367 / UNIT P (SE/SE) Sec. 7, T23N, R7W, NMPM
- Federal 2307 7P Com 3H / API #30-039-31368 / UNIT P (SE/SE) Sec. 7, T23N, R7W, NMPM

Michael Bullock
Office: 918.900.2603
Cell: 405.818.8618

From: Tamra Sessions <tsessions@logosresourcesllc.com>
Sent: Monday, October 8, 2018 10:07 AM
To: Michael Bullock <michael.bullock@whiptailmidstream.com>; Ernie Johnson <ernie.johnson@whiptailmidstream.com>
Cc: Kelly Maxwell <kmaxwell@logosresourcesllc.com>
Subject: C-106 Letter from Transporter: LOGOS Federal 2307 7P Com pad

Good afternoon Michael/Ernie,

LOGOS is working on the C-106 Letter from Transporter submittal to NMOCD for Federal 2307 7P Com well pad. Please reply back to this email with your approval.

LOGOS Operating, LLC is requesting approval from the transporter to utilize Pipeline Transfer LACT equipment on the Federal 2307 7P Com well pad. Product from the below listed wells would be produced through the LACT equipment, gathered through LOGOS pipeline, and transferred into Whiptail Midstream, LLC's (transporter) pipeline system through a check meter. Whiptail Midstream, LLC will be responsible for transporting LOGOS Operating, LLC's product to sales.

Federal 2307 7P PIPELINE LACT UNIT

WELLS TO BE SERVED BY PIPELINE LACT UNIT:

- Federal 2307 7P Com 1H / API #30-039-31366 / UNIT P (SE/SE) Sec. 7, T23N, R7W, NMPM
- Federal 2307 7P Com 2H / API #30-039-31367 / UNIT P (SE/SE) Sec. 7, T23N, R7W, NMPM
- Federal 2307 7P Com 3H / API #30-039-31368 / UNIT P (SE/SE) Sec. 7, T23N, R7W, NMPM

Tamra Sessions

Regulatory Specialist
Office 505-324-4145
tsessions@logosresourcesllc.com



