

Submit 1 Copy To Appropriate District Office
 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 Rd., Aztec, NM 87410
 District IV – (505) 476-3460
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

Form C-103
 Revised July 18, 2013

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

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" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-015-44330
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Earthstone Operating, LLC		6. State Oil & Gas Lease No.
3. Address of Operator Earthstone Energy, 1400 Woodloch Forrest Dr. Suite 300, The Woodlands, Tx 77380		7. Lease Name or Unit Agreement Name Dark Canyon 15-22 WCA State Com
4. Well Location Unit Letter <u>D</u> : <u>230</u> feet from the <u>North</u> line and <u>640</u> feet from the <u>West</u> line Section <u>15</u> Township <u>23S</u> Range <u>26E</u> NMPM County <u>Eddy</u>		8. Well Number <u>5H</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3325 GR		9. OGRID Number 372137
		10. Pool name or Wildcat Purple Sage; Wolfcamp (98220)

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
DOWNHOLE COMMINGLE <input type="checkbox"/>			
CLOSED-LOOP SYSTEM <input type="checkbox"/>			
OTHER: <input checked="" type="checkbox"/>		OTHER: <input type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Earthstone Operating, LLC is requesting to add the following well to the previously approved Surface Commingling Order PLC-519:
 Dark Canyon 15022 WCA State Com 5H → 30-015-44330
 This well goes to the Dark Canyon 15-22 West Battery.

Allocation shall be conducted via individually metering each well.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE  TITLE Regulatory Supervisor DATE 6/6/23

Type or print name Mikah Thomas E-mail address: mithomas@earthstoneenergy.com PHONE: 432-661-7106

For State Use Only

APPROVED BY: Dean R. McClure TITLE Petroleum Engineer DATE 06/06/2023
 Conditions of Approval (if any):

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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-44330	² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP
⁴ Property Code 332535	⁵ Property Name DARK CANYON 15-22 WCA STATE COM	⁶ Well Number 5H
⁷ OGRID No. 331165	⁸ Operator Name EARTHSTONE OPERATING, LLC	⁹ Elevation 3325.5

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	15	23 S	26 E		230	NORTH	640	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	22	23 S	26 E		2191	NORTH	1831	WEST	EDDY

¹² Dedicated Acres 480	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

<p>SHL 230' FNL 640' FWL SURFACE LOCATION LAT 32.310996 LONG -104.287592 NAD83 N 476875.85 E 555468.61</p> <p>N 477089.98 E 554828.56</p> <p>KOP 186' FNL 1350' FWL LAT 32.311166 LONG -104.285294 NAD 83</p> <p>TOP PERF. 343' FNL 1433' FWL LAT 32.310738 LONG -104.285024 NAD 83</p> <p>N 474423.96 E 554831.17</p> <p>N 471757.12 E 554833.76</p> <p>BHL 2191' FNL 1831' FWL BHL LOCATION LAT 32.290761 LONG -104.283726 NAD83 N 469515.12 E 556666.57</p> <p>N 466485.28 E 554838.46</p> <p>N 477156.92 E 557518.61</p> <p>N 477222.14 E 560208.65</p> <p>N 471916.62 E 560211.33</p> <p>N 471682.49 E 557503.38</p> <p>TOE PERF. 2147' FNL 1831' FWL LAT 32.290882 LONG -104.283727 NAD 83</p> <p>N 466545.36 E 557527.02</p>	<p>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete 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 agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Deborah Marberry</i> 11/03/22 Signature Date</p> <p>DEBORAH MARBERRY Printed Name</p> <p>dmarberry@earthstoneenergy.com E-mail Address</p> <p>¹⁸ SURVEYOR CERTIFICATION</p> <p>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.</p> <p>SEPTEMBER 23, 2019 Date of Survey</p> <p><i>[Signature]</i> Signature and Seal of Professional Surveyor:</p> <p>Certificate Number: 12797 SURVEY NO. 7512A</p>
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Intent ☐ As Drilled ☒

API # 30-015-44330		
Operator Name: EARTHSTONE OPERATING, LLC	Property Name: DARK CANYON 15-22 WCA	Well Number 5H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
D	15	23S	26E		186	NORTH	1350	WEST	EDDY
Latitude 32.311166					Longitude 104.285294			NAD 83	

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
C	15	23S	26E		343	NORTH	1433	WEST	EDDY
Latitude 32.310738					Longitude 104.285024			NAD 83	

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
F	22	23S	26E		2147	NORTH	1831	WEST	EDDY
Latitude 32.290882					Longitude 104.283727			NAD 83	

Is this well the defining well for the Horizontal Spacing Unit?

☐ NO

Is this well an infill well?

☐ YES

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API # 30-015-44538		
Operator Name: EARTHSTONE OPERATING, LLC	Property Name: DARK CANYON 15-22 STATE COM WCB	Well Number 2H

Allocation Methodology

PRORATED ALLOCATION

GAS ALLOCATION

Each well has a Wellhead (WH) meter and a Gas Lift (GL) meter. The CTB has a FC Meter that measures the volume of gas that leaves the CTB, this FC meter is considered an FMP. The INJ BB meter that measures off-lease gas coming on lease used for gas lift from the gathering line is considered an FMP.

1. Buyback FM is the volume of off-lease gas used for gas lift and to run the compressor, it is calculated by Buyback – Comp Fuel,
2. Net Well Production is base amount of production not used for gas lift and is calculated by subtracting Gas Lift (GL) volume from the wellhead (WH) meter reading.
3. Lease use is the volume of gas used by the equipment on the CTB allocated to the wells by Lease Use volume/total hours produced by all wells on CTB * each wells Hours On.
4. Theoretical % used for the allocation of production/sales is calculated by dividing the Net Well Production volume for each well into the sum of the Net Well Production.
5. CTB FC-INJ BB (Net CTB Gas) is volume of gas for royalty purposes, off lease gas is netted out of FMP meter volume. FC Meter – (INJ BB Meter – GL Compressor). This gives you the volume of gas for royalty purposes that was produced/sold from the CTB.
6. Theoretical % for each well is multiplied by the Net CTB Gas.
7. HP Flare is volume of gas flared from the CTB, allocated to wells by Theoretical % for each well * HP FL volume.
8. VRU measures the gas from the oil tanks, is allocated based on allocated oil production for each well. VRU is an FMP. VRU measured volume * theoretical % of oil produced. Each well's oil measured volume/by sum of all oil measured volumes on CTB = theoretical oil volume.
9. Total Net FMP Volumes is total sold from the CTB to the gathering line and is calculated by Net CTB Gas + VRU.
10. Allocated Production is all gas produced by CTB and is calculated by adding Total Net FMP Volumes+ HP Flare + Lease Use.
11. Total Net FMP Volumes is total sold from the CTB to the gathering line and is calculated by Net CTB

OIL ALLOCATION

Each well has an oil meter measuring the volume of oil produced by the well. This volume is used as the allocation point to prorate Allocated Production and Total Sales Volume (FMP) back to each well.

1. Allocated production is volume of oil produced by the CTB and is calculated by Ending Tank Inventory + Pipeline LACT (FMP) – Beginning Tank Inventory.
2. Available oil for sale is calculated by Pipeline Lact (FMP) – Beginning Tank Inventory.
3. Theoretical % is calculated by dividing each oil meter volume into the sum of oil meters.
4. The Theoretical % for each well is multiplied by the Allocated Production and the Available Sales.
5. Total Sales Volume is the volume of oil sold through the FMP meter. It is calculated by adding available for sale to the beginning inventory for each well.
6. Beginning Inventory comes from previous accounting period's Ending Inventory for each well.
7. Ending Inventory for each well is calculated by adding Beginning Inventory + Allocated Production – Total Sales Volume.

WATER ALLOCATION

Each well has a water meter measuring the volume of water produced by the well. This volume is used as the allocation point to prorate Allocated Production and Total Transferred Volume back to each well.

1. Allocated production is volume of water produced by the CTB and is calculated by Ending Tank Inventory + Water Transfer – Beginning Tank Inventory.
2. Available Water to Transfer is calculated by Water Transfer – Beginning Tank Inventory.
3. Theoretical % is calculated by dividing each water meter volume into the sum of the water meters.
4. The Theoretical % for each well is multiplied by the Allocated Production and the Available Sales.
5. Total Transfer Volume is the volume of water transferred off the CTB. It is calculated by adding Available to Transfer to the beginning inventory for each well.
6. Beginning Inventory comes from previous accounting period's allocated Ending Inventory for each well.
7. Ending Inventory for each well is calculated by adding beginning inventory + Allocated Production – Total Transfer Volume.

Applied Allocation Spreadsheet Examples (Gas Stream)

Definition of Factors, Formulas, and Assets	
Gas Out	Daily meter reading from a testing vessel (shared or designated by well) for an individual well used as the basis for prorating total produced volumes.
Gas In	Daily meter reading from a designated meter for an individual well for measuring the amount of gas injected into a well for gas lift purposes.
Formation Gas	The total gas produced from the formation. Calculated by subtracting Gas In from Gas Out.
Theoretical % of Production	Calculated by dividing the Formation Gas for the individual well into the sum of all Formation Gas. Not visualized in the production accounting program.
Allocated Gas Production	Total volume of gas sold, flared, utilized for lease operations, or utilized as fuel for compression equipment and less the gas metered through the Gas Buy Back. Reporting Volume to the OGOR.
Allocated Gas Sales	Total volume sold from the CTB less the gas metered through the Gas Buy Back Meter. Reporting Volume to the OGOR.
Allocated Flared Volume	Total volume flared from the CTB. Reporting Volume to the OGOR.
Gas Flare Meter	Metered volume of gas sent to combustion or flare for the CTB
Gas Lease Use Meter	Metered volume of gas utilized for lease operations for pneumatics, power generation, or other necessary operations to operate the CTB.
Gas Sales Meter	Metered volume of gas transferred at a custody exchange point to a midstream gatherer or direct purchaser.
Gas Compressor Factor	Total gas burned as fuel for operation of gas lift compression for purposes of injection for gas lift purposes. An hourly rate factored by the total Hours On of the compressor daily.
Hours On	Total hours the compressor was ran for the allocation period.
Gas Buy Back Meter	Metered volume of gas transferred from a custody exchange point to the operator for use as lease use, compression fuel, or injection volume.
Total Gas Basis	Sum of all gas utilized in the operation of the lease.

Individual Well Factors and Allocated Production

Well Name	Gas Out	Gas In	Formation Gas	Theoretical % of Production	Allocated Gas Production	Allocated Gas Sales	Allocated Flared Volume
xxxxx	2370.00	765.80	1604.20	0.61553	1817.67	1556.07	221.59
xxxxx	1763.00	761.00	1002.00	0.38447	1135.33	971.93	138.41
Totals	4133.00	1526.80	2606.20	1.00000	2953.00	2528.00	360.00

Total Gas Metered Out of CTB

Asset	Gas Production	Hours On
Gas Flare Meter	360.00	
Gas Lease Use Meter	0.00	
Gas Sales Meter	2528.00	
GL Compressor Factor	65.00	24.00
Gas Buy Back Meter	0.00	
Total Gas Basis	2953.00	

Applied Allocation Spreadsheet Examples (Oil Stream)

Definition of Factors, Formulas, and Assets	
Oil Allocation Factor	Daily meter reading from a testing vessel (shared or designated by well) for an individual well used as the basis for prorating produced sellable volumes from the OMT.
Well Test Hours	Total hours that well test was conducted for. Used to adjust Oil Allocation Factor to a 24 hour rate. Well test hours can be more than or less than 24 hours but greater than 0.
Hours Flowed	Total hours that well was flowing produced fluids. Used to adjust Oil Allocation Factor to compensate for Oil Allocation Factor being adjusted to a 24 hour rate.
Oil Allocation Factor Basis	The Oil Allocation Factor adjusted to 24 hour basis and corrected for any downtime incurred for the well. Reporting volume to the OGOR.
Theoretical % of Production	Calculated by dividing the Oil Allocation Factor Basis for the individual well into the sum of all Basis' at the OMT. Not visualized in the production accounting program.
Allocated Oil Production	Volume of sold or stored volume produced in the time period ready to sell from the OMT allocated to each well. Reporting Volume to the OGOR.
Oil Master Tank (OMT)	Relative terminology synonymous with Central Tank Battery.
Beginning Oil	Inventory in bbls from the previous accounting periods calculated ending inventories. In the case of a new OMT, during any accounting period, Open inventory would be = 0.
Ending Oil	Inventory in bbls as measure for the date of accounting. Ending inventory can be positive, negative or neutral each day, but cannot sum to < 0.
Dispositions	A measured volume removed from a tank or moved through a LACT. Recorded from a ticket or direct meter read.
Oil Production	Total volume sold or available for sell for each asset at the OMT for accounting period. Calculated by subtracting Ending Oil from Beginning Oil and summing with Dispositions
OMT Totals	Formula to calculate the total volumes sold or available for sale at the OMT for the accounting period. Reporting Volume to the OGOR.
LACT	Measures in bbls the volume transferred at the LACT meter to custody of the midstream gatherer or direct to purchaser.
Oil Tank #	Physical tank count at the OMT. Tanks can vary in size by battery and volume requirements. BBL/Inch factors are calculated and applied at the asset level.

Individual Well Factors and Allocated Production						
Well Name	Oil Allocation Factor	Well Test Hours	Hours Flowed	Oil Allocation Factor Basis	Theoretical % of Production	Allocated Oil Production
xxxxx	817.59	24.00	24.00	817.59	0.62374	821.11
xxxxx	493.20	24.00	24.00	493.20	0.37626	495.33
Totals	1310.79	-	-	1310.79	1.00000	1316.44

Oil Master Tank (OMT)				
Asset	Beginning Oil	Ending Oil	Dispositions	Oil Production
Oil Tank 1 (OT1)	166.80	161.24		-5.56
Oil Tank 2 (OT2)	88.96	88.96		0.00
Oil Tank 3 (OT3)	63.94	63.94		0.00
LACT			1322.00	1322.00
OMT Totals	319.70	314.14		1316.44

Applied Allocation Spreadsheet Examples (Water Stream)

Definition of Factors, Formulas, and Assets	
Water Allocation Factor	Daily meter reading from a testing vessel (shared or designated by well) for an individual well used as the basis for prorating produced volumes from the WMT.
Well Test Hours	Total hours that well test was conducted for. Used to adjust Water Allocation Factor to a 24 hour rate. Well test hours can be more than or less than 24 hours but greater than 0.
Hours Flowed	Total hours that well was flowing produced fluids. Used to adjust Water Allocation Factor to compensate for Water Allocation Factor being adjusted to a 24 hour rate.
Water Allocation Factor Basis	The Water Allocation Factor adjusted to 24 hour basis and corrected for any downtime incurred for the well. Reporting volume to the OGOR.
Theoretical % of Production	Calculated by dividing the Water Allocation Factor Basis for the individual well into the sum of all Basis' at the WMT. Not visualized in the production accounting program.
Allocated Water Production	Volume of sold or stored volume produced in the time period ready to sell from the WMT allocated to each well. Reporting Volume to the OGOR.
Water Master Tank (WMT)	Relative terminology synonymous with Central Tank Battery.
Beginning Water	Inventory in bbls from the previous accounting periods calculated ending inventories. In the case of a new WMT, during any accounting period, Open inventory would be = 0.
Ending Water	Inventory in bbls as measure for the date of accounting. Ending inventory can be positive, negative or neutral each day, but cannot sum to < 0.
Dispositions	A measured volume removed from a tank or moved through a Water Transfer Meter. Recorded from a ticket or direct meter read.
Water Production	Total volume moved or available for me for each asset at the WMT for accounting period. Calculated by subtracting Ending Water from Beginning Water and summing with Dispositions
WMT Totals	Formula to calculate the total volumes sold or available for sale at the WMT for the accounting period . Reporting Volume to the OGOR.
Water Transfer Meter	Measures in bbls the volume transferred at the Water Transfer meter to custody of the midstream gatherer or direct to disposal.
Water Tank #	Physical tank count at the WMT. Tanks can vary in size by battery and volume requirements. BBL/Inch factors are calculated and applied at the asset level.

Individual Well Factors and Allocated Production						
Well Name	Water Allocation Factor	Well Test Hours	Hours Flowed	Water Allocation Factor Basis	Theoretical % of Production	Allocated Water
xxxxx	1571.00	24.00	24.00	1571.00	0.55512	1577.66
xxxxx	1259.00	24.00	24.00	1259.00	0.44488	1264.34
Totals	2830.00	-	-	2830.00	1.00000	2842.00

Water Master Tank (WMT)				
Asset	Beginning Water	Ending Water	Dispositions	Water Production
Water Tank 1 (WT1)	36.14	36.14		0.00
Water Tank 2 (WT2)	30.58	30.58		0.00
Water Tank 3 (WT3)	33.96	33.96		0.00
Water Transfer Meter			2842.00	2842.00
WMT Totals	100.68	100.68		2842.00

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

COMMENTS

Action 224376

COMMENTS

Operator: CHISHOLM ENERGY OPERATING, LLC 1400 Woodloch Forest, Ste 300 The Woodlands, TX 77380	OGRID: 372137
	Action Number: 224376
	Action Type: [IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

COMMENTS

Created By	Comment	Comment Date
dmcclure	Approved under Action ID: 224317	6/6/2023

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CONDITIONS

Action 224376

CONDITIONS

Operator: CHISHOLM ENERGY OPERATING, LLC 1400 Woodloch Forest, Ste 300 The Woodlands, TX 77380	OGRID: 372137
	Action Number: 224376
	Action Type: [IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

CONDITIONS

Created By	Condition	Condition Date
dmcclure	Allocation shall be conducted via individually metering each well.	6/6/2023
dmcclure	Please review the content of the Administrative Order and approved request(s) to ensure you are familiar with the authorities granted and any conditions of approval. If you have any questions regarding this matter, please contact me.	6/6/2023