

U.S. Department of the Interior
Bureau of Land Management
Colorado State Office

Grand Junction Field Office
Uncompahgre Field Office
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THE PROPOSED

WHITEWATER UNIT

MASTER DEVELOPMENT PLAN

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1.0 INTRODUCTION

Fram Operating, LLC, (“Fram”) is proposing a five year program of oil and gas development within leases in Mesa and Delta counties, Colorado in the Whitewater Unit. The area consists of approximately 90,400 acres containing a mixture of public, split estate and private lands. The project would be located about 15 miles east and southeast of Grand Junction, Colorado. The unit area is bounded in the northeast by the Mesa Plateau, to the southeast by the City of Delta, to the southwest by Highway 50 running parallel to the Gunnison River, and to the northwest by the City of Grand Junction (Figure. 1). The leases lie within portions of the following Townships in Mesa and Delta counties, Colorado:

6 th Principal Meridian	T 11 S, R 98 W
	T 12 S, R 97 W
	T 12 S, R 98 W
	T 13 S, R 98 W
	T 13 S, R 97 W
	T 14 S, R 98 W
	T 14 S, R 97 W
	T 14 S, R 96 W

Ute Meridian	T 1 S, R 1 E
	T 1 S, R 2 E
	T 2 S, R 1 E
	T 2 S, R 2 E
	T 3 S, R 2 E
	T 4 S, R 3 E

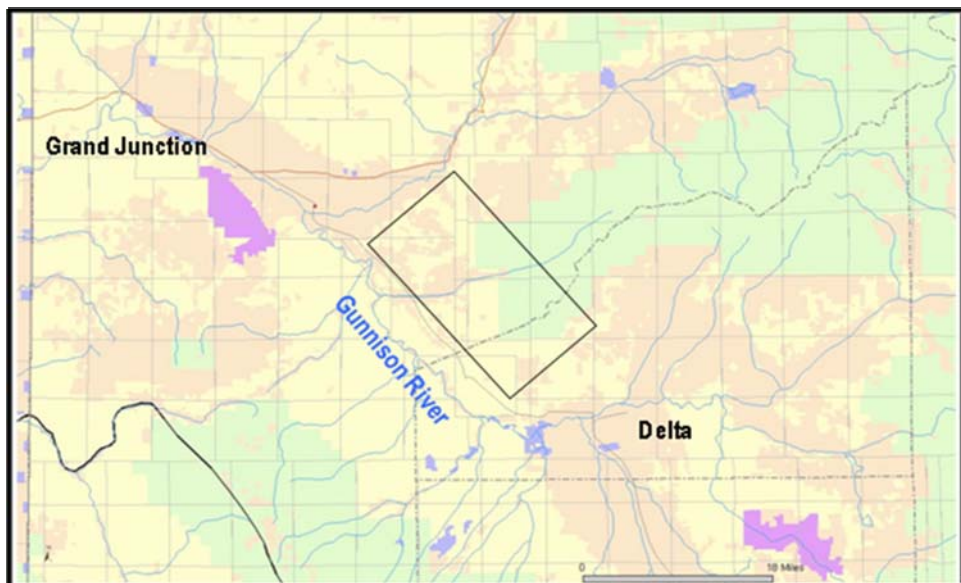


Figure 1 The Whitewater Area

The proposal consists of constructing, drilling, completing, operating, and abandonment of up to 492 wells. The wells would be drilled on 46 new well pads and 9 existing well pads which may require expansion. This proposal also includes gas gathering pipelines, water lines, access roads, and compressor sites to support the proposed wells.

The Grand Junction Field Office and the Uncompahgre Field Office of the Bureau of Land Management (BLM) administer the federal mineral estate in the Whitewater area. Private leases are also contained within the subject area.

2.0 HISTORY OF THE FIELD

Initial drilling within the Whitewater Unit was done in an exploration program executed in the 70's and early 80's when Mitchell Energy drilled seven wells in 1974 and 22 wells from 1979 through 1981. In 2002 and 2003, Evertson Operating drilled an additional seven wells, and South Oil Company and Aspen Well Drilling drilled 11 wells in 2005. During this prior drilling, hydrocarbons, primarily natural gas, were encountered in all wells within the Dakota and Morrison formations (although a few wells did encounter oil within the Dakota Formation). However, pipelines did not exist and the small volumes were not significant to warrant a development. Therefore, all of the wells were plugged and abandoned.

The Trans-Colorado gas pipeline (TSP) was built in 1996 through the unit area and is connected to the unit at two gathering stations, providing a ready sales channel. The TSP is connected to the Rocky Mountain Express (REX) and provides a secure and cost efficient sales channel for the Whitewater gas to the Eastern coast of the USA. Further aided by significantly improved market conditions for both natural gas and oil, this has fundamentally changed the economics of the reserves within the Dakota Formation and has led to the current development plan.

3.0 THE PROPOSED ACTION

Due to the lack of sustained production, Fram perceives this area as an exploratory prospect. The rate of development would depend largely on factors such as advances in technology and economic-based factors such as the productivity of the wells, price of natural gas and the cost of services. If the market sustains favorable conditions, Fram proposes to develop seven new well pads in the first year, nine new well pads each year for four years, and three new well pads in the sixth year of development.

3.1 Development – Construction, Drilling and Completion

3.1.1 Construction

Fram will comply with all appropriate federal, state, county, municipal and local permits, including all necessary environmental clearances and permits (Colorado Oil and Gas Conservation Commission, U.S. Army Corps of Engineers, Colorado Division of Wildlife, U.S. Fish & Wildlife, U.S. Forest Service, Colorado Department of Transportation, Colorado Department of Public Health and Environment (CDPHE), and local government approvals) before commencing any work.

All construction, whether well pad or access road or pipeline, will be covered by a General Construction Permit for stormwater discharges from the CDPHE. The permit number for the Whitewater Unit is COR-03B947. A Stormwater Management Plan is currently in place for each of the permitted areas. The plans will be updated as necessary to include all new construction. Best Management Practices as required by the permits and plans will be in place before, during and after construction until the location has reached final stabilization. All other requirements of the permits will be followed, such as the bi-weekly inspections and post-precipitation event inspections. Fram also has prepared and would follow a Noxious Weed Management Plan, Fire Prevention Plan, Fire Protection Emergency Action Plan, and Spill Prevention Control and Countermeasure Plan.

All trees removed during construction activities would be cut to a maximum stump height of 6 inches, bucked into 4-foot lengths and either stacked off location or windrowed to serve as silt catchments. Pinyon pine trees would be chipped, buried or disposed of. Rootballs would be buried, placed offsite or scattered over the disturbed area as part of final reclamation. Other vegetation, such as sagebrush and other shrubs, may be scattered offsite or placed on well pad fills to help screen the pads. Cleared and grubbed juniper trees could be windrowed along toe of pad or road fill slopes and placed over pad and pipeline disturbances. Where necessary, Fram will obtain a BLM woodcutting permit when removing trees.

Proposed Well Pads

Each proposed well pad would accommodate up to a maximum of 10 wells. Six wells will allow full development of the reserves contained in the Dakota Formation. The remaining four wells will allow for development of the Morrison and Entrada formations.

The proposed well pads would be constructed from the native soil and rock materials present using a bulldozer, grader, front-end loader, or backhoe. The pad would be constructed by clearing vegetation, stripping and stockpiling topsoil and leveling the pad area using cut-and-fill techniques. The tops of the cut banks and pad corners may be rounded to improve their appearance.

The working surface of the newly constructed well pads would average 300 feet by 300 feet, and with cut and fill slopes, disturbance per pad would be approximately 2.07 acres. The target zone for the wells is a depth from approximately 4,500 to 5,000 feet. A large drilling rig is not necessary to reach this depth, thereby eliminating the need for a large pad. Construction of 46 new well pads and expansion of 9 existing well pads would result in an estimated 114 acres of new short-term surface disturbance. Following interim reclamation, a working area of about 0.5 acre per pad would remain disturbed throughout the long-term production phase of the well. Total long-term disturbance is estimated at 27.5 acres, following interim reclamation (see Table 1).

Proposed Access Roads and Gathering Lines

To provide access to the well pads, construction of approximately 15 miles of new roads is proposed. Forty-eight miles of existing jeep trails would be upgraded to comply with BLM's Gold Book Standards for roads. In addition, approximately 23 miles of existing roads will be maintained as necessary for the anticipated traffic flow. It is anticipated that there would be approximately 90 miles of new gathering lines constructed. The proposed roads would be constructed to meet standards for the anticipated traffic flows and all-weather requirements. Road and gathering pipelines would be constructed within a 40 foot disturbance corridor, which would be reduced to 25 feet (18 foot running road surface) (see Attachment A – Table 1). Bulldozers, trackhoes and/or road graders would first clear vegetation and topsoil. The road would be constructed using standard equipment and techniques approved by the BLM, which could include ditching, draining, crowning, surfacing, sloping and dipping the roadbed as necessary.

Proposed gathering lines would be constructed within or immediately adjacent to existing, upgraded or proposed roads, generally along the uphill side of the road. Excavated topsoil would be windrowed separately from the underlying subsoil and stored along the road until the trench is backfilled. All pipelines would be buried to a minimum depth of 3 feet from surface to top of pipe. The pipeline trench would be excavated mechanically; pipe segments would then be welded together and tested, lowered into the trench and covered with excavated material. Generally, one mile of pipeline would be constructed in 4 to 7 days.

Each pipeline would be pressure tested with fresh water and/or nitrogen gas to locate leaks. Fresh water would be acquired from the City of Grand Junction. Water would be transported to the testing location by truck. Nitrogen to be used for testing would be obtained by a third-party contractor, such as Halliburton or BJ Services, who would then be on location to pump the nitrogen test. After testing, if fresh water is used, the water would either be disposed of at Danish Flats, an existing offsite evaporation pond facility near Cisco, Utah or it would be taken to a proposed Fram disposal well.

Proposed Compressor Site

Under the presumption of successful wells, Fram has also located a third potential compressor site where pipelines would tie in to the existing third-party Trans Colorado gathering system. Fram proposes to install reciprocating compression. The rate of compression and well performance will dictate the amount of compression and horsepower required. Preliminary estimates indicate a need for no more than 4 acres of disturbance. The site would contain two compressors, with an engines rated at 1,340 BHP, for a total of 2,680HP.

3.1.2 Drilling and Completion

Up to 492 vertically and directionally drilled wells would be developed as part of the proposed action. Fewer wells may be drilled than are proposed because of geologic and market uncertainties.

Fram drilling operations would be conducted in compliance with all Federal Oil and Gas Onshore Orders, as well as all other applicable rules and regulations. Drilling would target gas production zones at approximately 4,500-5,000 feet deep.

Surface casing will be run to a minimum depth of 100 feet below any freshwater aquifers within one mile. The surface hole would be cased with steel casing and cemented in place entirely from ground level to the depth as determined in the individual APD. Prior to drilling below the surface casing, a Blowout Preventor (BOP) would be installed on the surface casing and both the BOP and the surface casing would be tested for pressure integrity. The BOP and related equipment would meet the minimum requirements of Onshore Oil and Gas Order No. 2 and the BLM would be notified in advance of all pressure tests.

After drilling the hole to its final depth, logging tools would be run into the well to evaluate the potential hydrocarbon resource. If the evaluation indicates adequate hydrocarbon resources are present and recoverable, steel production casing would be run and cemented into place in accordance with the well design as approved by the BLM and applicable Conditions of Approval (COAs). The proposed casing and cementing program would be designed to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. BLM approval is required prior to the use of any isolating medium other than cement.

After production casing has been cemented in place, the drilling rig would be removed and a completion rig would be moved in. Well completion consists of running a Cement Bond Log to evaluate cement integrity and to correlate the cased hole logs to the open hole logs. The casing is then perforated across the hydrocarbon producing zones and the formation may be stimulated to enhance the production of oil and gas. The typical method used for stimulation consists of a hydraulic fracture treatment in which sand and non-toxic fluids are pumped into the producing formation with sufficient pressure to fracture the rock formation. The sand serves as a proppant to keep the created fracture open, thereby allowing reservoir fluids to move more efficiently into the well bore. Due to the water sensitive nature of the target formations, Fram does not expect to use the typical hydraulic fracture. Instead of water, Fram plans to fracture with foam made from 85 percent CO₂ and 10 percent methanol.

Specific directional plans for each well will be included with site specific APDs (Application for Permit to Drill). Downhole operations would be done with tools to facilitate proper direction and path of the well.

A well is anticipated to require approximately 10 days of drilling and 5 days to complete. Water necessary for drilling would be hauled to the site by truck. A small water truck, also known as a bobtail, can carry between 80 and 85 barrels per trip; a larger water transport truck can carry between 100 and 120 bbl per trip. Water volume used in drilling operations is dependent on the depth of the well and any losses that might occur during drilling. Fram plans to drill with air, natural gas and/or foam. Should mud drilling prove necessary, Fram anticipates use of approximately one barrel per foot.

On the first and last day of drilling, Fram anticipates an approximate average of 13 to 15 heavy truck round trips per day and 3 to 5 light vehicle round trips and 3 to 5 heavy truck round trips per day for the remaining days of drilling. Water for drilling would be acquired from the City of Grand Junction.

Fram estimates the numbers of workers per rig at 8. The rig will drill 24 hours per day, 7 days per week.

3.2 Production – Operation and Maintenance

3.2.1 Surface Facilities

Surface facilities at each well pad location would consist of wellheads, separator/dehydrator units, gas metering units, and aboveground condensate and produced water tanks with approximately 100 to 400 barrel capacities. Multi-well locations would share production equipment, whenever feasible, to minimize surface occupancy/disturbance. All production equipment with a chimney, vent or stack shall be fitted with a device that will prevent birds from entering the chimney, such as an excluder cone or equivalent.

Production facilities shall be located and arranged to facilitate safety and maximize interim reclamation opportunities, e.g. located at the access road end of the pad, with tanks in cut. As practical, access to production facilities should be provided by a teardrop-shaped road through the production area, so that the driving area may be clearly defined and limited and so that teardrop center may be revegetated. All production equipment would be painted to match the surrounding terrain and located to reasonably minimize long term surface disturbance and visual impact. BLM would select the colors for all facilities, including metal containment berms placed around the tanks, at sites associated with federal surface. In cases of split estate lands with federal minerals, the surface equipment will be painted in accordance with BLM requirements unless the private surface owner requests differently.

Telemetry equipment would be used to remotely monitor wells. The use of telemetry would minimize traffic to and from the well locations in order to minimize impacts on wildlife and plants. A pumper truck will be required to periodically visit the well pads. The frequency of the visits will be based upon information gathered from the telemetry equipment.

Tank batteries would be placed within secondary containment to prevent offsite migration of accidentally spilled condensate or produced water. Secondary containment would consist of corrugated steel containment berms or earthen berms. Compaction and construction of earthen berms surrounding the tank batteries would be performed to prevent lateral movement of fluids through the utilized materials. Secondary containment would be sized to contain a minimum of 110 percent of the storage capacity of the largest tank within the berm. All loading lines would be placed inside the containment berm.

Access roads will be upgraded and maintained as necessary to prevent soil erosion and accommodate year-round traffic.

Fram shall regularly monitor and promptly control noxious weeds or other undesirable plant species as set forth in the joint BLM/Forest Service *Noxious and Invasive Weed Management Plan for Oil and Gas Operator*, dated March 2007. A Pesticide Use Proposal (PUP) must be approved by the BLM prior to the use of herbicides. Annual weed monitoring reports shall be submitted by December 1.

Produced water may be confined to the cuttings pit for a period of 90 days after initial production. Produced water of approximately 3 to 5 barrels per day will be transferred by poly line to the compressor sites or other yet to be determined central location. Water will be trucked offsite to an approved commercial disposal facility, or to Fram's proposed disposal well at a yet to be determined location. Condensate will be transported to market by tanker trucks.

3.2.2 Workovers or Recompletion

Periodically, the workover or recompletion of a well may be required to ensure that efficient production is maintained. Workovers can include repairs to the well bore equipment (casing, tubing, rods or pump), the wellhead or the production facilities. These repairs would usually be completed during daylight hours. The frequency of this type of work cannot be accurately projected because workovers vary from well to well.

3.3 Abandonment and Reclamation

3.3.1 Well Plugging and Abandonment

Dry/non-producing wells would be plugged, abandoned, and reclaimed within 90 days of well completion, weather permitting. Upon abandonment, each borehole would be plugged, capped, and its related surface equipment removed. Subsurface pipelines would be plugged at specific intervals. A Sundry Notice would be submitted by the operator to the BLM that describes the engineering, technical, and/or environmental aspects of final plugging and abandonment. This notice would describe final reclamation procedures and mitigation measures associated with the final reclamation performed by the operator. The BLM and the COGCC standards for plugging would be followed. A configuration diagram, a summary of plugging procedures and a job summary with techniques used to plug the wellbore (e.g., cementation) would be included in the Sundry Notice.

3.3.2 Reclamation

All surface disturbances would be recontoured and revegetated in accordance with an approved reclamation plan, including control of noxious weeds. One of Fram's goals is to accomplish as much reclamation as possible during the life of the well, even on those pads that will need to retain a larger production area during the life of the well.

Fram would restore the well locations and access roads to approximately their original contours. During reclamation of these sites, fill material would be pushed into cuts and over the backslope. No depressions would be left that would trap water or form ponds. Upon completion of backfilling, leveling and recontouring, the stockpiled topsoil would be evenly spread over the reclaimed area(s). All disturbed surfaces would be reseeded with a seed mixture approved or recommended by either BLM or the private surface owner. All seeding would be conducted after September 1 and prior to ground frost. Spring seeding would be conducted after the frost leaves the ground but no later than

May 15. If the seeding is unsuccessful, Fram may be required to make subsequent seedings.

Revegetation would be considered successful when the following objectives are met:

- Immediate short term: Establishment of desirable perennial vegetation by the end of the second growing season, capable of renewing itself.
- Acceptable establishment: Acceptable level of desirable vegetation by the end of the third growing season.
- Long-term establishment: Level of revegetation approximates the original undisturbed condition, in terms of canopy cover and species composition.

Interim Reclamation

After completion activities, Fram would reduce the size of the well pad within 6 months of the last well scheduled on a pad or after 12 months without a well being drilled on the pad. Areas unnecessary to operation shall be reshaped to blend with natural topography to the extent possible. Interim reclamation would be accomplished by grading, leveling, spreading topsoil and seeding, as recommended by the BLM or private surface owner. Interim Reclamation would reduce the disturbed area at each pad to approximately 0.5 acres per wellhead after well development. If interim revegetation is unsuccessful, additional prep and reseeding shall be completed annually until standards are met. Requirements for reseeding of unsuccessful temporary seeding will be considered on a case-by-case basis.

Interim reclamation work would include:

- Removing all debris, materials and trash unnecessary to production operations.
- Reshaping of all areas unnecessary to operation to blend with natural topography to the extent possible.
- Reseeding with seed mixes and techniques specified by the BLM.

Final Reclamation

If the well is abandoned or is a dry hole, reclamation is to be final. Final reclamation work would include:

- All equipment, facilities and trash shall be removed from the location.
- Each borehole shall be plugged, capped and its related surface equipment removed.
- Subsurface pipelines shall be purged and plugged at specific intervals.
- After the well is plugged and abandoned, the site shall be reclaimed as soon as possible. Earthwork and seeding must be completed within one year from the date of plugging and abandonment.
- Dry hole marker shall be sub-surface, to prevent raptor predation upon small game, including sage grouse.

Attachment A

Tables

Table 1 – Surface Disturbance

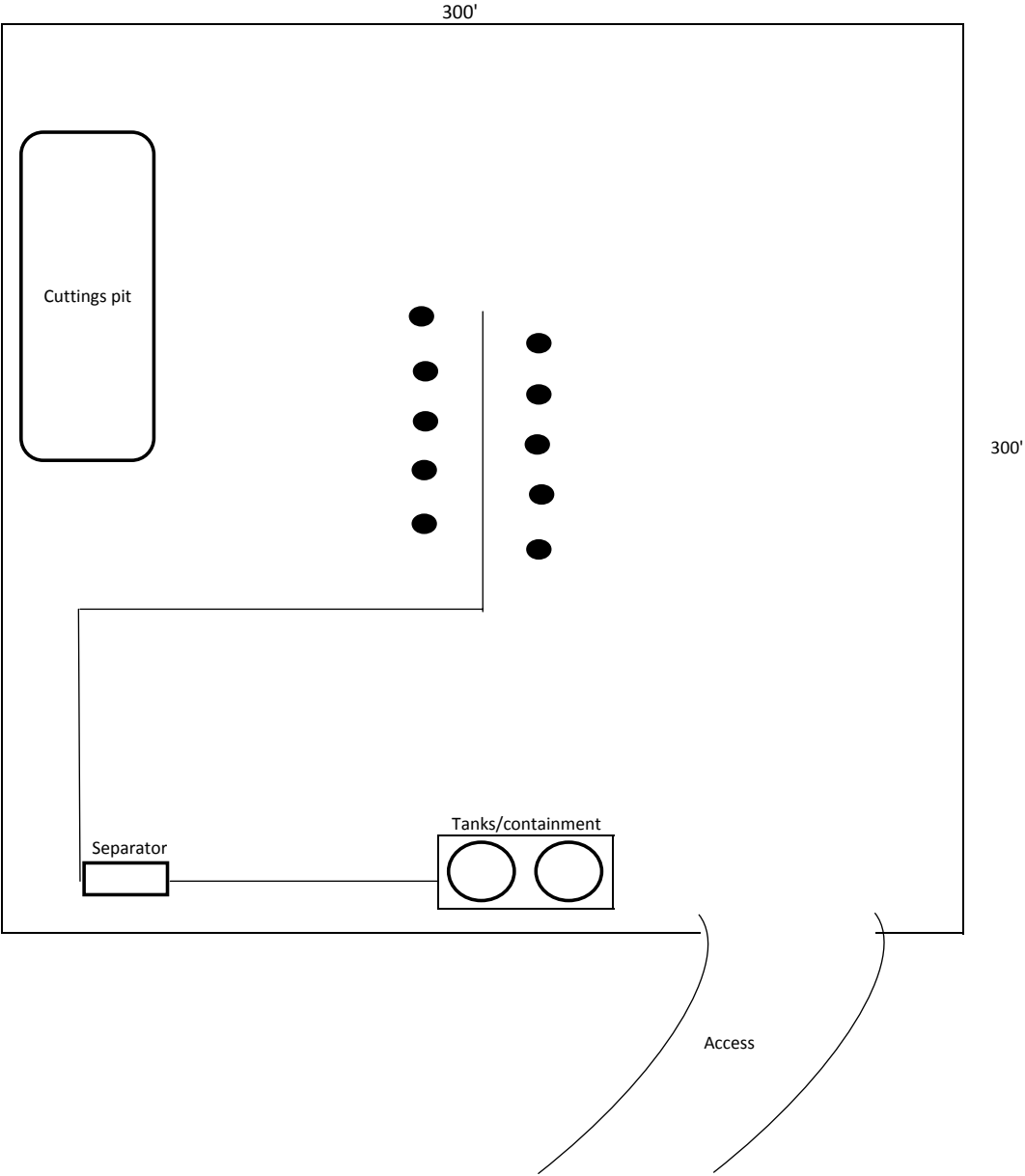
Feature	Length (miles)	Width	Short-Term Disturbance (Acres)	Long-Term Disturbance (Acres)
Well Pads ¹	N/A	N/A/	114.00	27.5
Compressor Sites ²	N/A	N/A/	4.00	4.00
Pipeline – Adjacent to existing improved road ³	22.72	20	55.08	0
Pipeline – Cross country ⁴	5.03	20	12.19	0
Roads – New (No pipeline) ⁵	0.99	30	3.60	3.00
Roads / Pipeline – Cross country ⁶	13.83	40	67.05	41.91
Roads / Pipeline – Adjacent to existing un-improved road (Jeep Trail or Two-Track) ⁷	47.86	40	232.04	75.42
Total			487.96	151.83

Notes:

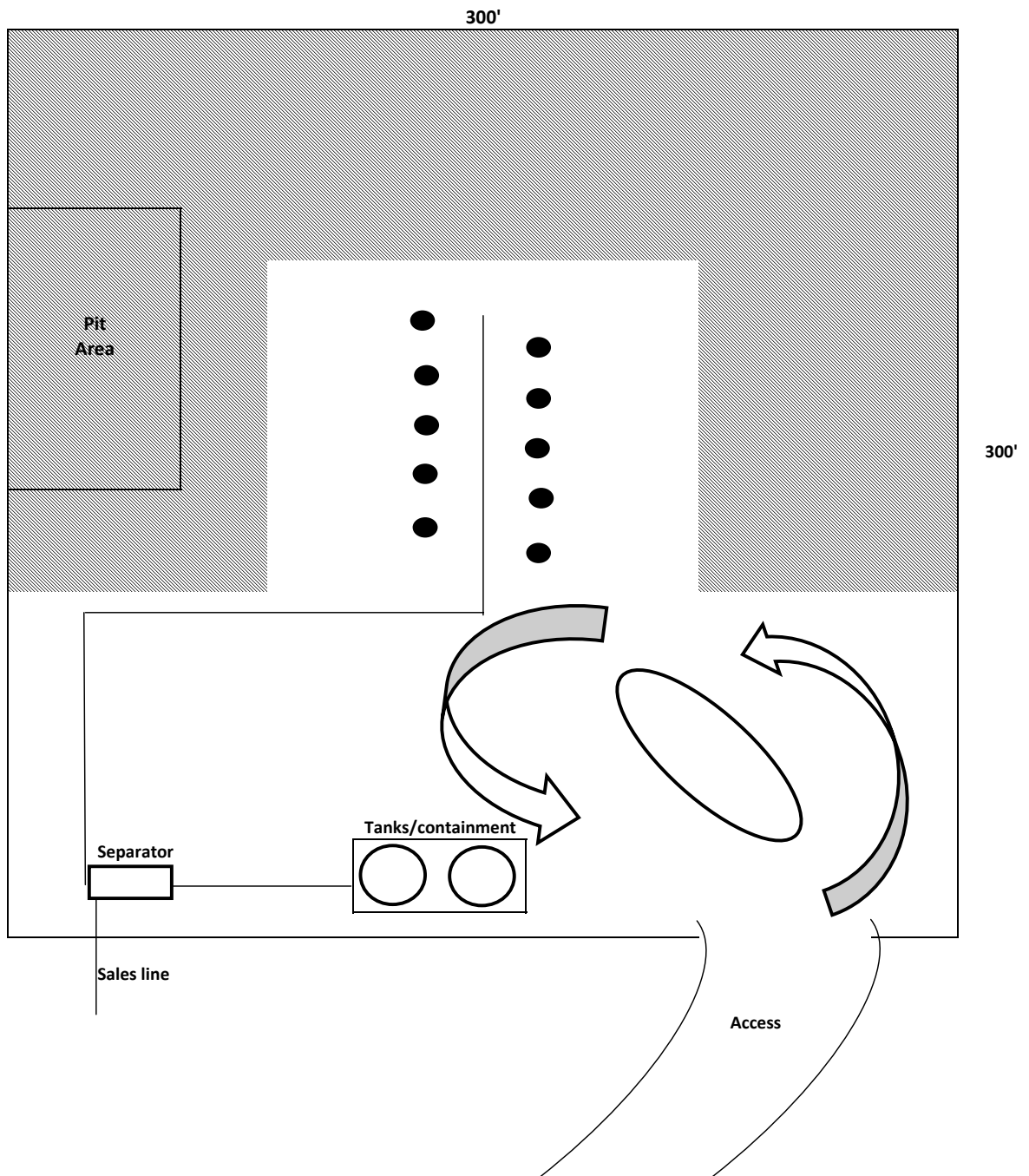
- 1 Assumes construction of 46 new wells pads and expansion of 9 existing well pads.
- 2 Assumes one additional compressor site.
- 3 Assumes that no road upgrading would be required. Pipeline installation only.
- 4 Assumes pipeline installation in area where there is not existing disturbance (road).
- 5 Assumes new road without an adjacent pipeline (pipeline has other route) – 25 foot long-term disturbance.
- 6 Assumes new road/pipeline – no existing improved or unimproved road – 25 foot long-term disturbance.
- 7 Assumes new pipeline adjacent to existing two-track or jeep trail (12 feet in width) – road would require upgrading assumes 25 foot long term disturbance.

Attachment B
Well Pad Layout and Facilities Layout Diagrams

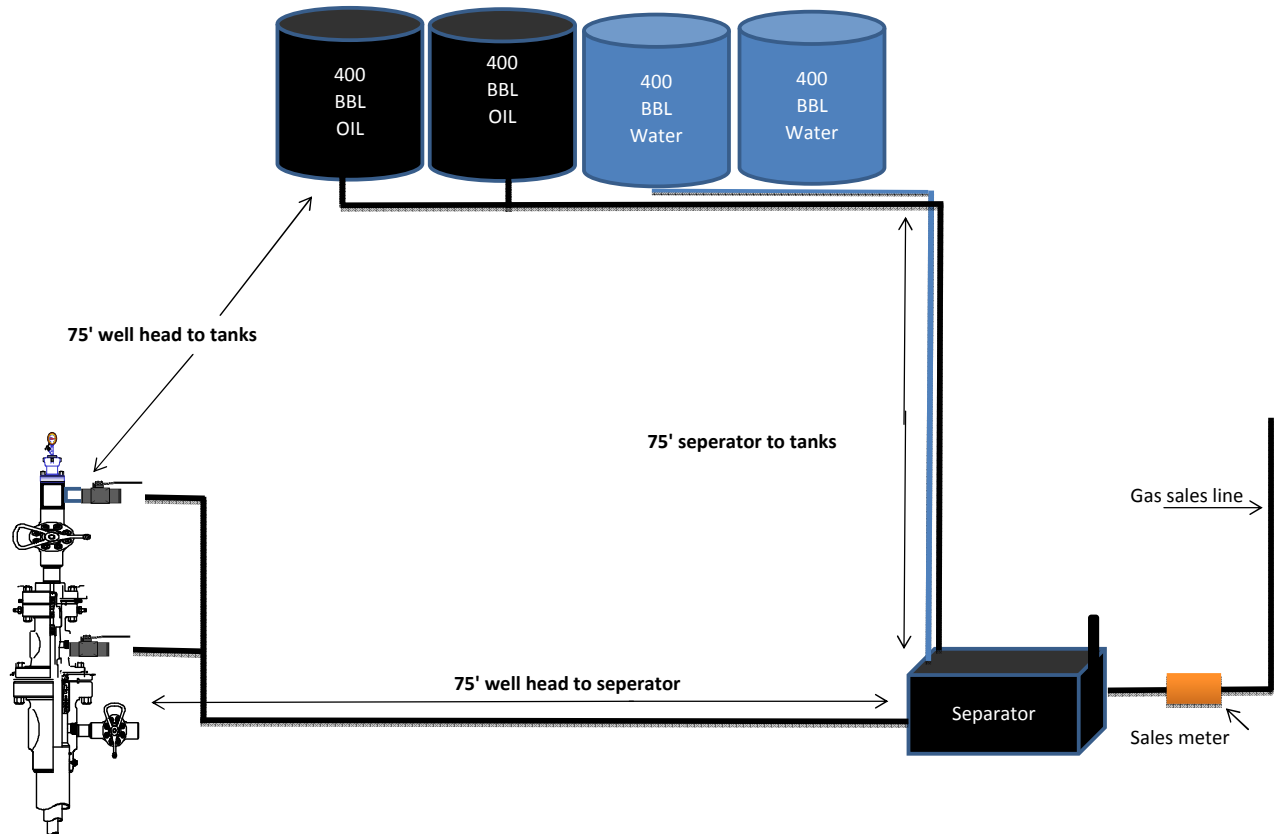
TYPICAL LOCATION LAYOUT DURING DRILLING



TYPICAL LOCATION LAYOUT FOR PRODUCTION



TYPICAL WELL FACILITY LAY OUT



All lines are buried

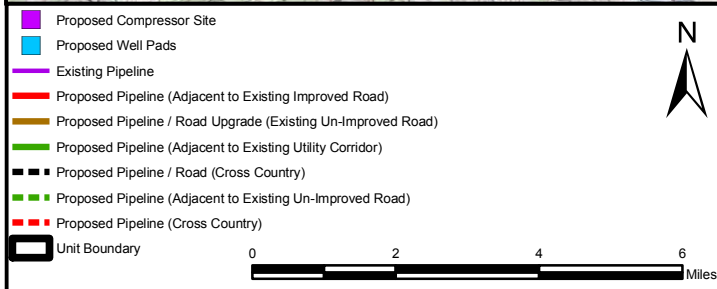
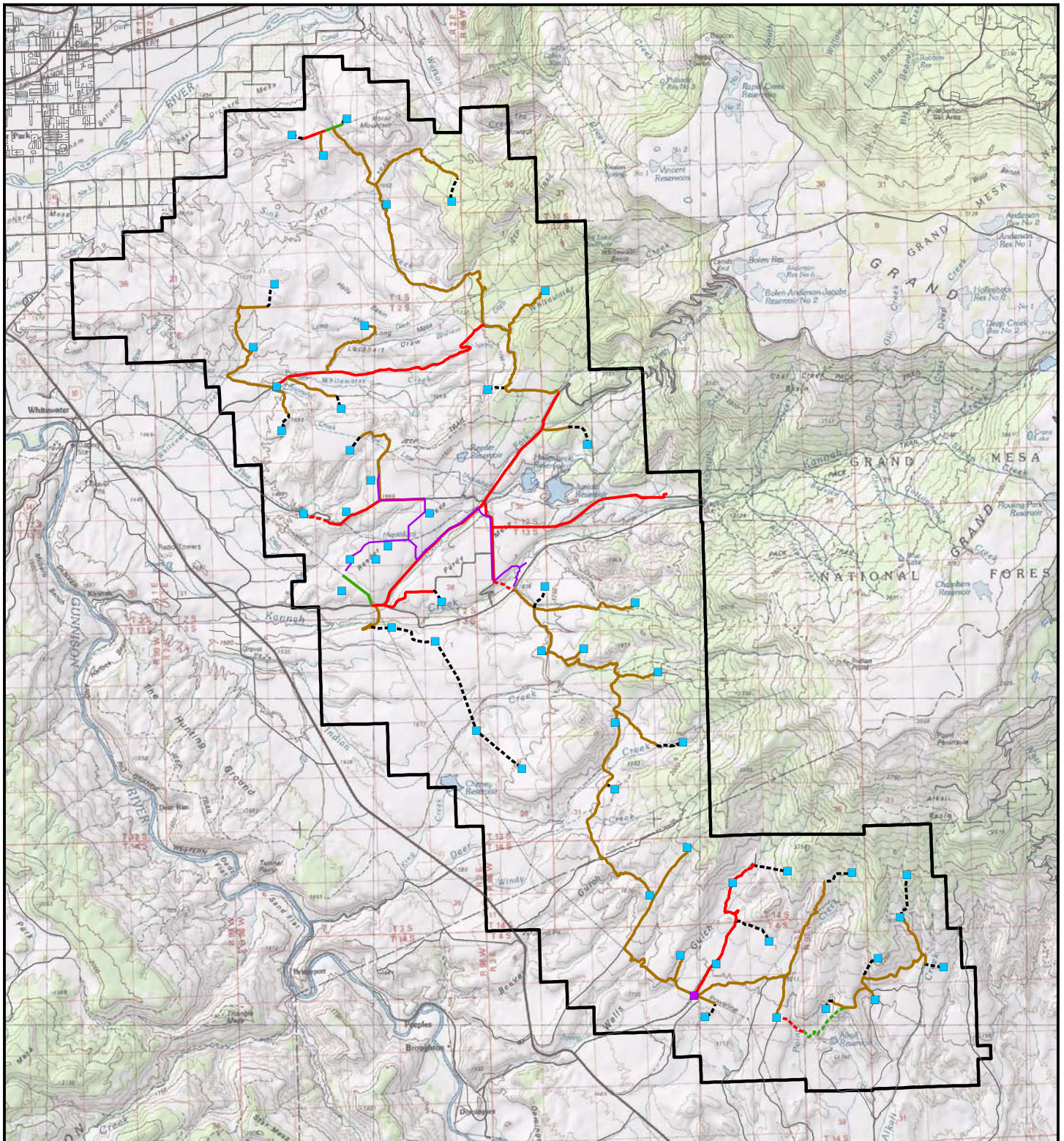
Tank numbers will depend on number of wells coming into facility.

These footages comply with the State of Colorado Regulations.

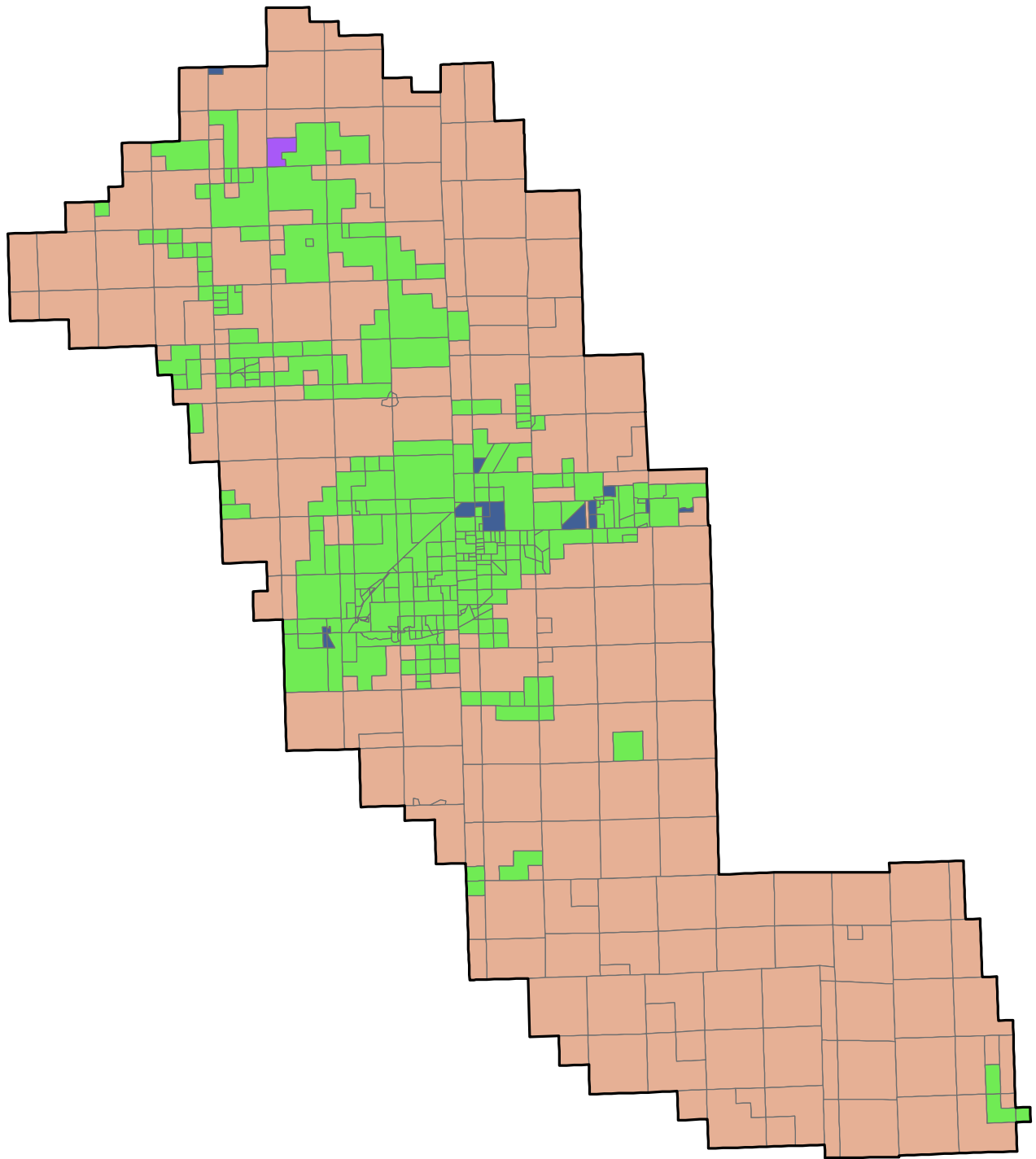
Note: a secondary containment system large enough to contain 110% of the largest tank in the battery must be installed around the tanks. In Colorado they will also require a secondary containment unit around the separator.

Attachment C

Maps



Whitewater Unit Proposed Development



Unit Boundary

Mineral

- Federal
- Federal / Fee
- Fee
- Unknown



Whitewater Unit
Mineral Ownership

Appendix A

13-Point Surface Use Plan Submitted by Fram Operating, LLC

1. Existing Roads

- A. Existing roads in the Project Area are shown on topographic map in Attachment C of the MDP.
- B. The Project Area can be accessed from Whitewater, Colorado.
- C. If a road to a specific location will need to be widened, it will be delineated in the APD.
- D. Existing roads will be maintained in conditions equal to or better than those existing prior to the commencement of operations. Maintenance of the roads used to access the drill site locations will continue until abandonment and reclamation of the wells. Two-track roads will not be flat bladed. Excessive rutting or other surface disturbance will be avoided. Operations will be suspended temporarily during adverse weather conditions if excessive rutting begins to occur.

2. Proposed Access Routes

- A. Routes that could be used for access are shown on the topographic map in Attachment C of the MDP.
- B. Width maximum – 25 feet overall with an 18-foot road running surface.
- C. The road will be constructed to meet the standards of the anticipated traffic flow and all weather requirements.
- D. Maximum grades will not exceed BLM standards.
- E. In an effort to minimize disturbance, equipment and vehicles will be confined to travel these corridors.
- F. The proposed access routes have been sited to avoid areas of steep terrain and soils susceptible to increased erosion from the proposed action.
- G. Flagging material, pin flags, painted wooden survey lath, or other directional markers specified by the BLM will be temporarily placed along the proposed limits of disturbance access routes to serve as guides to the locations. Markers will be removed as soon as they are no longer needed.
- H. Specific needs for the construction of cuts or fills and drainage structures, such as culverts, water bars, or drainage dips for the proposed access routes will be verified during the on-site review of the MDP sites.
- I. Gates, cattle guards, or fence cuts – none required unless specified during the onsite inspection.
- J. Dust will be controlled on the roads and locations during construction and drilling by approved periodic dust mitigation measures.

3. Location of Existing and/or Proposed Facilities

- A. Proposed locations of gas gathering lines, water disposal lines, and well pads are shown on the topographic map in Attachment C of the MDP.
- B. See Attachment B of the MDP for a general well pad and facilities diagrams.
- C. Production facilities shall be located and arranged to facilitate safety and maximize interim reclamation opportunities, e.g. located at the access road end of the pad, with tanks in cut. As practical, access to production facilities should be provided by a teardrop-shaped road through the production area, so that the driving area may be clearly defined and limited and so that teardrop center may be revegetated.
- D. Surface equipment will be painted a flat, non-reflective color as determined by the BLM.
- E. Should drilling result in established commercial production, the following will be shown:
 - 1. Proposed location and attendant lines, by flagging, if off well pad.
 - 2. Dimensions of facilities.
 - 3. Construction methods and materials.
 - 4. Protective measures and devices to protect livestock and wildlife.
 - 5. All buried pipelines will be buried to a depth of 3 feet and would be co-located with roads.
 - 6. Construction width for pipelines adjacent to roads would be an additional 10 feet of disturbance. Construction of pipelines not adjacent to roads would require 20 feet of disturbance.
 - 7. Pipeline location warning signs will be installed within 90 days after construction is complete.
 - 8. Pipeline area of disturbance will be requested on the site-specific APD if needed. Areas with road and adjacent pipeline construction will be 40 feet in width for working surface. After construction is complete, 15 feet would be rehabilitated leaving a 25 foot wide road (18 feet running surface). In the event production is established, the wells will be tied-in to existing pipelines as shown in Mineral Lease Map.
 - 9. The area used to contain the proposed production facilities will be built using native materials. If these materials are not acceptable, arrangements will be made to acquire appropriate materials from private sources. Approval from BLM will be sought before using non-native materials.
 - 10. A berm will be constructed completely around any production facilities which contain fluids (i.e. production tanks, produced water tanks, etc.). These dikes will be constructed of compacted subsoil or metal secondary containment with liner, be impervious, hold 110 percent of the capacity of the largest tank and be independent of the back cut.

4. Location and Types of Water Supply

- A. Water to be used for the drilling of these wells will be hauled by truck over the roads from the nearest water supply. Water volume used in drilling operation is dependent on the depth of the well and any losses that might occur during drilling.
- B. The water source is the City of Grand Junction.

5. Construction Materials

- A. All construction material for these location sites and access roads shall be borrowed material accumulated during the construction of the location sites and access roads. No additional construction material from other sources is anticipated at this time. If it is required in the future, the appropriate actions will be taken to acquire it from private sources.
- B. All trees on the locations, access roads and proposed pipeline routes shall be disposed of by one of the following methods:
 - 1. Trees shall be cut with a maximum stump height of six inches (6”) and cut to 4-foot lengths and stacked off location. Trees will not be dozed off the location or access road, except on private surface where trees may be dozed. Trees may also be dozed on pipeline routes and then pulled back onto right-of-way as part of final reclamation.
 - 2. Limbs may be scattered off location, access road, or along the pipeline, but not dozed off.
 - 3. Rootballs shall be buried or placed off location, access road, or pipeline route to be scattered back over the disturbed area as part of the final reclamation.

6. Methods of Handling Waste

- A. Produced water will be disposed by either trucking to Danish Flats, an approved commercial disposal facility located near Cisco, Utah, or to Fram’s proposed disposal well.
- B. Garbage – garbage, trash, and other waste materials will be collected in a portable, self-contained and fully-enclosed trash cage during drilling and completion operations. Upon completion of operations (or as needed) the accumulated trash will be disposed of at an authorized sanitary landfill. No trash will be burned on location or placed in the cuttings pit.
- C. Sewage – self-contained, chemical toilets will be provided for human waste disposal. Upon completion of operations, or as needed, the toilet holding tanks will be pumped and the contents thereof disposed of in the nearest, approved sewage disposal facility.
- D. Cuttings – drill cuttings will be buried in the reserve pit once it has dried.
- E. The cuttings pit shall be constructed in a manner which minimizes the accumulation of surface precipitation runoff into the pit and maintains a 2-foot

freeboard between the maximum fluid level and the lowest point of containment. In the event that cuttings pit fluids threaten to rise higher than the required 2-foot freeboard, immediate notification shall be provided to the BLM and concurrent steps taken to remove or minimize the further introduction of additional fluids until alternative containment methods can be approved.

- F. Escape ramps designed to allow all animals to escape the lined pit shall be installed every 50 feet along the pit slope and at each corner.
- G. The cuttings pit will be lined with a minimum of a 16 mil liner.
- H. Prior to the commencement of drilling operations, the cuttings pit will be fenced on three (3) sides according to the following minimum standards:
 - Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
 - Standard steel, wood, or pipe posts shall be used between the corner braces. The maximum distance between any two (2) posts shall be no greater than sixteen (16) feet.
 - All wire shall be stretched using a stretching device before it is attached to the corner posts.
 - The fourth side of the cutting pit will be fenced immediately upon removal of the drilling rig and the fencing will be maintained until the pit is backfilled.
- I. Immediately after the removal of the drilling rig, all debris and other waste materials not contained in the trash cage will be cleaned up and removed from the well location. No adverse materials will be left on the location. Any open pits will be maintained until such time as the pits are backfilled.
- J. Any hydrocarbons on the pit will be removed from the pit within 24 hours of introduction.
- K. Hazardous Materials Management
 - 1. Project-related activities involving hazardous materials will be conducted in a manner that minimizes potential environmental impacts. A file will be maintained containing current Material Safety Data Sheets (MSDS) for all chemicals, compounds, and/or substances that are used in the course of construction, drilling, completion, production and reclamation operations.
 - 2. Hazardous substance, as defined by Comprehensive Environmental Response Compensation Liability Act (CERCLA), will not be used in the construction or drilling operations associated with these wells. Commercial preparations, which may contain hazardous substances, may be used in production operations and will be transported within the Project Area. Any materials containing hazardous substances will be handled in an appropriate manner to minimize the potential for leaks and spills to the environment. Resource Conservation and Recycling Act (RCRA) states that hazardous wastes will not be generated by well-drilling operations. Only RCRA exempt working pit contents will be buried onsite.
 - 3. Spills of oil, gas, or any other potentially hazardous substance will be reported immediately to the BLM, and other responsible parties. Spills will be mitigated immediately; appropriate measures for cleanup implemented and spilled material removed to an approved disposal site.

7. Ancillary Facilities

No ancillary facilities are currently anticipated for the development of this area. If facilities are deemed necessary to drilling operations at a later date, they will be submitted to the Authorized Officer via a sundry notice (Form 3160-5) for approval prior to commencing operations for that location.

8. Well Site Layout

- A. Well pad layout diagrams are provided in Attachment B to the MDP. Cross sections will be drafted to visualize the planned cuts and fills across the location and will be submitted with the individual APDs. An average minimum of six (6) inches of topsoil will be stripped from the location (including the areas of cut, fill, and/or subsoil storage) and stockpiled for future reclamation of the well site.
- B. A production schematic showing an average proposed production facility layout is provided in Attachment B to the MDP.
- C. Operator will notify the Authorized Officer at least forty-eight (48) hours prior to construction of the well pad and/or related facilities.

9. Plans for Reclamation of the Surface

- A. BLM will be contacted at least forty-eight (48) hours prior to commencement of any reclamation operations.
- B. Producing Locations
 - 1. Immediately upon well completion, the well location and surrounding area(s) will be cleared of all debris, materials, trash, and junk not required for production.
 - 2. Immediately upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43CFR 3162.7-1.
 - 3. Before any dirt work to restore the location takes place, the cuttings pit will be completely dry and all cans, barrels, pipe, etc., will be removed.
 - 4. Other waste and spoil materials will be disposed of immediately upon completion of drilling and workover activities.
 - 5. The cuttings pit and that portion of the location and access road not needed for production facility/operations will be reclaimed within ninety (90) days from the date of well completion, weather permitting.
 - 6. If the well is a producer, Fram will upgrade and maintain access roads as necessary to prevent soil erosion, and accommodate year-round traffic. Areas unnecessary to operations will have areas reshaped. Topsoil will be redistributed and disked. All areas outside the work area will be reseeded according to the Bureau of Land Management recommendations for seed mixture.
- C. Interim Reclamation work would include:
 - a. Removing all debris, materials and trash unnecessary to production operations.

- b. Reshaping of all areas unnecessary to operation to blend with natural topography to the extent possible.
 - c. Reseeding with seed mixes and techniques specified by the BLM.
- D. Dry Hole/Abandoned and Plugged Locations
- 1. On lands administered by the BLM, abandoned well sites, roads or other disturbed areas will be restored to near their original condition. This procedure will include ensuring revegetation of the disturbed areas to the specification of the BLM at the time of abandonment.
 - 2. All disturbed surfaces will be recontoured to the approximate natural contours and reseeded according to BLM specifications. Reclamation of the well pad and access road will be performed as soon as practical after final abandonment and reseeded operations will be performed in the fall or spring following completion of reclamation operations.
 - 3. During reclamation of the site, fill material will be pushed into cuts and up over the backslope. No depressions will be left that will trap water or form ponds. Topsoil will be distributed evenly over the location and seeded according to the recommended seed mixture. The access road and location shall be ripped or disked prior to seeding. Perennial vegetation must be established. Additional work shall be required in case of seeding failures, etc.
 - 4. Seedbed will be prepared by disking then roller packing following the natural contours. Seed will be drilled on contours at a depth no greater than one-half (1/2) inch. In areas that cannot be drilled, seed will be broadcast at double the seeding rate and harrowed into soil. Certified seed will be used whenever available.
 - 5. Fall seeding will be completed after September 1, and prior to prolonged ground frost. Spring seeding will be completed after the frost has left the ground and prior to May 15th.
 - 6. Upon completion of backfilling, leveling and recontouring, the stockpiled topsoil will be evenly spread over the reclaimed area(s). Prior to reseeded, all disturbed surfaces will be scarified and left with a rough surface. No depressions will be left that would trap water and form ponds. All disturbed surfaces will be reseeded with a seed mixture to be recommended by the BLM.

10. **Surface Ownership**

Surface ownership is either fee or federal as shown on the Mineral Ownership Map in Attachment B and will be noted on the individual APD. In the case of privately-owned surface, Fram will certify to BLM that a Surface Use Agreement has been reached with the owner prior to construction. If an Agreement cannot be reached, Fram will comply with laws or regulations governing the Federal right of re-entry to the surface (43 CFR 3814).

11. **Other Information**

- A. A Class III Cultural Resource Inventory of the proposed drill sites, access roads, and other facilities on Federal lands will be conducted and a report filed with the Bureau of Land Management – Grand Junction Field Office.
- B. Fram will be responsible for informing all persons in the area who are associated with the Project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites or for collection of artifacts. If archaeological, historical or vertebrate fossil materials are discovered during the course of any construction activities, Fram will suspend all operations that further disturb such materials and immediately contact the appropriate BLM office. Operations in the area of discovery will not resume until written authorization to proceed has been issued by the BLM Authorized Officer.
- C. An Environmental Assessment will be prepared by a third party contractor to analyze the full effects of the proposed development.
- D. Fram shall regularly monitor and promptly control noxious weeds or other undesirable plant species as set forth in the joint BLM/Forest Service Noxious and Invasive Weed Management Plan for Oil and Gas Operator, dated March 2007. A Pesticide Use Proposal (PUP) must be approved by the BLM prior to the use of herbicides. Annual weed monitoring reports shall be submitted by December 1.

Operator's Representative and Certification

Representative

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Field Representative

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I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Executed this 16th day of Feb, 2010.

Name David A. Cook

David A. Cook

Manager

Fram Operating, LLC Suite 287, Colorado Springs, CO 80901
719-593-8787 (phone)

Appendix B

9-Point Drilling Plan Submitted by Fram Operating, LLC

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations, Onshore Oil and Gas Orders No. 1 and No. 2, and the approved Plan of Operations. The Operator is fully responsible for the actions of its subcontractors. A copy of the Conditions of Approval will be furnished to the field representatives to ensure compliance.

Fram Operating, LLC, will be operating under its BLM Bond # COB000260.

1. Estimated Tops of Important Geologic Markers

- A. Formations and depths will be submitted with the site specific APD.

2. Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations

- A. The proposed casing and cementing program has been designed to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use.
- B. The surface casing shall be cemented back to surface either during the primary cement job or by remedial cementing.

3. Operator's Minimum Specifications for Pressure Control

- A. The blowout preventor assembly shall consist of one blind ram preventor, one pipe ram preventor, and an annular preventor. All will be hydraulically operated. The BOP pipe and blind rams will be hydraulically tested to 100% of working pressure (if isolated from the surface casing with a test plug) or to 70% (2,065 psig) of the internal yield of the surface casing after nipping up. The annular preventor will be tested to yield of the surface casing after nipping up. The annular preventor will be tested to 50% of its' working pressure for 10 minutes or until provisions for the test are met. The pipe rams and blind rams will be function tested on each trip out of the hole, but not more than once per day. All such checks will be noted on the daily Tour Sheets.
- B. Accessories to the BOP include an upper and lower Kelly cock, a sub on the floor with a full opening valve to be stabbed into the drill string when the Kelly is not in the drill string; a drill pipe float (except for lost circulation conditions) and a choke manifold with a pressure rating equivalent to the BOP stack. An accumulator with a minimum of 1.5 times the volume of fluid necessary to close all BOP equipment will be part of the BOP system.
- C. Remove controls capable of both opening and closing all preventors will be readily accessible to the driller. A manual locking device (i.e. hand wheels) or automatic locking devices shall be installed as part of the system. The BOP will be kept in good mechanical working order. Checks and inspections will be recorded on daily Tour Sheets.

- D. Primary BOP actuating control will be located either in the doghouse or on the rig floor.
- E. Sufficient mud volume and weight material will be maintained on location to overcome any flows.

4. **Proposed Casing Program**

Casing	Depth	Hole Size	Size	Weight	Grade
Conductor	0-40'	20"	16"	65#	H-40
Surface	Surface to 500'	12.25"	9 5/8"	36 #/ft	K-55
Production	Surface to TD	7 7/8"	5 1/2"	15.50#/ft	J 55

- A. The proposed casing setting depths will vary depending on well location and drilling conditions. The depths listed in the table give the approximate anticipated setting depth.
- B. The casings proposed in the table are typical casings; should a different casing be required, it will be listed in the site-specific APD.
- C. All casing will be new or reconditioned and tested to meet or exceed API standards.

5. **Proposed Cementing Program**

A prototypical cementing program is as follows. Site specific programs will be included with each APD.

A. Conductor Casing

- Conductor Casing will be cemented to surface with redi-mix cement.

B. Surface Casing

Cement to surface as follows:

- 210 sks of class "G" Cement@ 15.8 ppg, 1.15 cu/ft/sk, with 2% Calcium Chloride, and 1/4 lb per sack Flocele. 50% excess. .
- If cement is not circulated to surface, a top job using Class "G" with 2% CaCl₂ will be used to top out to surface.

C. Production Casing

Lead Cement: 270 sks Thixlite + 2.5 lb/sk PSFlake + 0.5% LTR 2,635 ft. to 475 ft += 2,160 ft

Tail Cement 45 sks):1) 'G' + 0.5% CFR-2 + 1% CaCl₂ + 1/4 #/sk Polyflake 2,835 ft. to 2,635 ft. =200ft

All waiting on cement (WOC) times will be adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drill out.

6. **Proposed Mud Program**

The typical well will be drilled underbalanced with air, natural gas and/or foam. In cases where the underbalanced program is not practical, the following is a typical mud program. Site specific mud programs will be attached with the APD.

The well will be drilled to TD with a combination of fresh water and 3 percent KCL – polymer mud system. The applicable depths and properties of this system are as follows:

Depth (feet)	Type	Weight (ppg)	Viscosity (sec)	Water Loss (cc)
0-470	FW	± 8.4	NC	NC
470-TD	3 % KCL	± 8.4	35-60	8-10

Sufficient mud materials to maintain mud properties, to control lost circulation and to contain “kick” will be available at well site.

7. **Testing, Logging, and Core Programs**

Cores: None

DST's: None

Surveys: MWD surveys during build and drop portions of well plan.

Mud Logger: Base of surface casing (BSC) to TD.

Logging Program: GR TD to surface.

CNL-FDC, GR and Caliper; TD to BSC.

GR-CCL-CBL-VDL will be run from PBTD to 500' above indicated TOC during completion.

8. **Anticipated Abnormal Pressures or Temperatures**

No abnormal pressures or temperatures are anticipated. No H₂S gas is anticipated.

Due to the size of the Whitewater Unit, pressures vary from a minimum of 490 psi to a maximum bottom hole pressure of approximately 1,150 psi based on a pressure gradient of 0.34 in the Dakota/Cedar Mountain interval at TD. Maximum anticipated surface pressure is approximately 1,140 psig. Minimum

surface pressure is 490 psig. If any well has a different anticipated pressure, it will be listed in the site specific APD.

9. Anticipated Starting Date and Duration

- A. Dirt Work Start Up: Upon Approval of Site-Specific APDs
- B. Spud: As soon as rig is available
- C. Duration:
 - 1. Drilling: 10 days
 - 2. Completion: 5 days