M.R.O. 1—77,006—8-6-37.

(1) Number of pages 16.

(2) Date of repair 16. 11. 47.

(3) Initials of the Referencer

MADRAS RECORD OFFICE.

Government of Madras.

Public works **DEPARTMENT.**

G.O. No. 1953 Press / ~~Mis.~~

443-44

Dated 21. 7 1874.

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department,
21st July 1874.

No. 443. Read the following letter from Major J. BEATTY, R.E., District Engineer, Godavery, to Colonel G. W. WALKER, R.E., Secretary to Government, Public Works Department, dated Dowlaishweram, 18th June 1874, No. 877 :—

I HAVE the honor to submit herewith Mr. Vanstavern's report on the coal boring operations of the season at Beddadanole.

1 Report from Mr. Vanstavern.
1 Sketch Map.

2. Mr. Vanstavern was placed temporarily under the orders of the District Engineer for this duty in Public Works G. O., No. 615, of 9th March 1874. But he had received, at the end of January,* his instructions to proceed direct to the place where borings were to be undertaken, which he accordingly did. At Beddadanole he was joined by Mr. King of the Geological Survey Department. Work was commenced on the 17th February, and continued up to the 6th June. Mr. Vanstavern then packed up all tools and stores of any value and brought them down to Dowlaishweram, which he reached on the 15th instant; and I telegraphed to you the most important result of the season's work.

* By telegram from Nagpore.

3. The place, Beddadanole, lies to the west of the river Godavery, at a distance of about 38 miles from it by the shortest bandy track. It is in the Yernagudem Taluq, and the new Local Fund Road from Thallapudi to Ashwarowpett will pass within three miles of it. Thallapudi is a village on the right bank of the river, about 15 miles above Dowlaishweram.

4. The total number of holes bored was four :—

(*a.*)—Hole No. 1, which was carried down to a depth of 16 feet, proved a failure owing to the want of sand augers.

(*b.*)—In hole No. 2 shale and coal were met with at a depth of 116 feet. After boring through 11 feet of shale and coal the hole was continued up to 229 feet 11 inches where it was stopped by the light clay caving in.

(*c.*)—Hole No. 3 was carried down to a depth of 274 feet, without finding shale or coal, and abandoned for the same reason that stopped No. 2.

(*d.*)—In hole No. 4 black clay and shale were met with at a depth of 183½ feet, and after passing through 4 feet 10 inches of this, a seam of coal was found 4 feet and 6 inches in thickness. The boring was continued up to 200 feet, and work was then stopped for the season, owing to heavy rains and the difficulty of obtaining labor.

5. Mr. Vanstavern remarks on the unsuitable character of the tools supplied him for boring in clay, and makes some suggestions for more satisfactory working next season, should Government decide to send another party up there.

6. A sketch map of the country about Beddadanole accompanies Mr. Vanstavern's report, and this shows the relative positions of the different borings.

A small box* containing specimens† of the shale, coal, clays, etc., will also be sent.

* Packed and labelled by Mr. Vanstavern.

† Will be despatched by banghy to-day.

7. Mr. Vanstavern reports that the total expenditure on the work up to date has been about Rupees 3,500,* and further payments have yet to be made, amounting to about Rupees 1,500, making a total of Rupees 5,000. He has handed over the tools and stores he brought down from Beddadanole, and his cash balance, to the Executive Engineer in charge of Workshops, and under the instructions conveyed in your telegram of 7th ultimo I have directed him to return to Dumagudiem.

* Including his own pay and travelling batta.

From T. VANSTAVERN, Esq., Executive Engineer, Public Works Department, to Major J. BEATTY, R.E., District Engineer, Godavery District, dated Dowlaishweram, 16th June 1874, No. 65.

I HAVE the honor to submit the following report on the boring operations at Beddadanole during this last season :—

1*st*.—The work was commenced in the latter part of February last. On arrival at Beddadanole a place was selected and boring commenced.

BOREHOLE No. 1.—LEVEL 94 FEET SECTION. SUB-SOIL 16 FEET.

After going down to this depth came to sand and water. I tried to force down the piping and to get the sand up with valve bucket; but this utterly failing was, for the want of sand tools, obliged to abandon this hole and to commence another.

2*nd*.—SECTION OF No. 2 BOREHOLE.—LEVEL 100 B. M.

Sandstone	89·00
Dark clay	17·00
Shale with coal	11·00
Dark clay	1·00
Light clay	27·11
Black clay	7·00
Sandstone	4·00
Dark clay	4·3
Black clay...	5·6
Sandstone	6·6
Light clay (soft)	33·9
Dark clay	6·0
Brown clay...	8·0
Total...	229·11

water struck in this hole at 5 feet depth close to the main stream.

This hole was commenced in the out-crop of the bed of sandstone in the hopes of it being a solid bed of sandstone overlaying coal; but after getting down the full depth bored, the hole began to give considerable trouble by caving in at the soft clay; half a day was generally spent clearing out the hole before any further boring could be gone on with, and at last it became so bad that the hole could not be cleared out; it had to be abandoned, and another hole commenced.

3*rd*.—No. 3 BOREHOLE.—LEVEL 105 FEET.

Water struck at 44 feet deep.

Sub-soil	1·0
Gravel	2·5
Sandstone	93·7

Proceedings of the Madras Government, Public Works Department,
21st *July* 1874.

White clay	10·0
Sandstone	39·0
Conglomerate	2·0
Sandstone	12·0
Light clay	10·0
Sandstone	51·6
Dark clay	5·6
Light clay	3·0
Dark clay	2·0
Sandstone	13·0
Clay	3·0
Sandstone	8·6
Sandstone with pyrites	10 0
Argillaceous sandstone	10·0
Total...	274·0

The 10 feet of iron pyrites cost several days labor to cut through.

During the working in this hole some delay occurred, owing to the breaking of the winch frames which had to be repaired before any more work could be done.

This hole when deep also commenced to give trouble by caving in.

One day it did so when the valve bucket was down, and after four hours' labor was got up with it and the rods twisted. Another attempt was made to clean out the hole, but after a whole day's work was unsuccessful and obliged to abandon it.

In this hole no shale or coal was struck, although I expected that the shale of No. 2 would have shown itself, for this reason shale in No. 2 must be of very little extent to the eastward, is either a pocket, or the sandstone beds dip more than they show at the surface. To the westward of No. 2 no borings have been sunk and no certain idea can be formed at surface of the extent of the bed of shale, but it may be naturally supposed to run in that direction according to the dip of the sandstone and the shale in No. 2 may represent the outrun.

4*th*.—No. 4 BOREHOLE.—LEVEL 107.

Water struck at 65 feet depth.

Surface soil	1·6
Light clay	18·6
Conglomerate	0·6
Sandstone	47·0
Dark clay	3·0
Light clay	2·6
Red clay	19·0
Sandstone	2·0
Dark clay	13·7
Sandstone	3·5
Dark clay	12·6
Sandstone	6·0
Dark clay	21·0
Sandstone	1·6
Dark clay	7·6
Shale and coal	0·8
Dark clay	1 0
Black clay	7·0
Dark clay	2·6
Clay with mineral charcoal	5·6

Iron Pyrites...	3 0
Hard sandstone	4·4
Black clay and shale	4·10
Coal	4·6
Dark clay	6·6
Hard stone	0·8

This gave also continual trouble by caving in, and took daily some hours to clean out before work could be commenced.

Coal has been struck in this hole; in appearance it is poor and could be anything but the outrun to the east. Further borings would be required to find the extent of the bed, and probably would improve as is generally the case in these beds.

By the depth it lays at it has apparently no connection with No. 2.

The dark and black clays in this hole have all carboneferous matter in them, apparently plants or leaves, but being so cut up with the boring tools, it is impossible to determine them.

The last 8 inches in this hole took some four days boring; the rock is very hard, and apparently metamorphous, but I have no means of testing it; a sample accompanies the clays.

5th.—The boring tools with which the work had to be done consisted of rods up to 300 feet, the set and piping in sets of 50 feet long; they are essentially rock-boring tools and but ill-suited to the ground met with here.

Should it be the intention of the Government to go on with the borings, it would be necessary to get suitable tools, or else much time and money will be lost, and consequent disappointment similar to what I have had when I found myself utterly helpless to go on and had to stop the borings.

Some of the tools are pretty well worn out and broke; others, such as rods, augers, cutters, valve buckets, will do again when repaired, but winches, piping, and some more rods will be required.

Should the Government concur in this, I can make out a specification of what is required for prosecuting borings satisfactorily in ground as met with at Beddadanole.

6th.—Trained men came with me for working the rods and other tools. For working the winches, I got labor from the surrounding villages; this was very unsatisfactory as they were continually changing and never stopped long enough to learn the work. In any future operations it would be advisable to engage men for the season; they might cost a little more, but this would be economy in the long run, as they would do more work when they got in the way of it.

7th.—Where the camp was pitched in the only place where there is a little water for some miles round, and should the work be continued next season some provision would have to be made for the supply. A couple of Norton's pumps would do.

Future borings will be to the south and west, and I should recommend the camp being pitched some where near Gunupevarum. The first holes then at the commencement of the season would be some distance off, and as it advanced would come nearer the camp.

8th.—The tools that have been in use require repairs. On this subject I have already addressed you in my letter No. 54, dated 15th May last.

9th.—I forward with this report a map of the site of the boreholes No. 2; 100 feet level is the B. M. Samples of shale, coal, clay, etc., are also sent.

10th.—The past season's work, although satisfactory as far as proving the existence of coal, has been apparently a poor one, but it must be taken into consideration, firstly, the unsuitableness of the tools which caused delay; and, secondly, that work was not commenced till three and a half months of the best time for work had passed. During the latter part of May, we had a good deal of rain which has on several occasions stopped the work, the village men being absent, occupied with their cultivation.

11th.—The estimate sent in for stores, such as charcoal, etc., is more than actually expended; this is owing to the nature of the ground worked in, the cutting tools requiring little facing and repairs, working in clay.

No. 444. ORDER THEREON, 21st July 1874, No. 1,953.

CIVIL WORKS, No. 36.

THESE papers report the result of Mr. Vanstavern's coal boring operations at Beddadanole from the 17th February to the 6th June 1874, of which Mr. King's report has already been recorded with G. O., No. 1,777, of 2nd July 1874.

2. The seam of coal, 4½ feet thick, struck at a depth of 188·4 in hole No. 4, is stated to be poor in appearance, which is apparently attributed to its being the outrun of the coal bed known to exist further west. More precise report of its quality will doubtless be furnished by Mr. King after assay. A bed of shale with coal, 11 feet thick, appears to have been pierced in hole No. 2 at a depth of 106 feet, but no further indications of coal resulted from further borings to a total depth of 230 feet. It is supposed from their relative depth that there is no connection between the coal of No. 4 hole and the indications of coal in No. 2. But the very slight indication of shale and coal found about 30 feet above the coal deposit in No. 4 may be analogous to that of No. 2, with which it agrees in the strata immediately over and underlying. However that may be, all four holes already worked are on the east side of the Beddadanole drainage, No. 4 being the most southern; and the conclusion arrived at to bore next season to the west and to the south seems a correct one.

3. The details of supply of boring tools, their nature, quality, and quantity, of trained and ordinary labor, of water-supply and the means of improving it, of next season's encamping ground, and date of its commencement, are all matters which the Government must leave to be arranged between Mr. Vanstavern and the District Engineer, who have only to let their wants be known in the shape of estimates and indents, to be supplied.

4. His Excellency the Governor in Council is quite satisfied that the results arrived at are trustworthy and useful; and very creditable to Mr. Vanstavern's energy, practical skill, and perseverance.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the District Engineer, Godavery.
,, Consulting Engineer for Railways.

Exd. S. T. Austin.
Spare Copies

Gobl. of 1874 Index

PUBLIC WORKS.

To

THE DISTRICT ENGINEER, GODAVERY.

&c., &c., &c.

Dated July 21st.

Read.

Sent.

C. O., 21st July 1874, No. 1,073.

JULY

Nos. 443-444

Coal—Passing orders on Papers reporting the results of Mr. Vanstavern's coal boring operations at Beddadanole, and observing, with satisfaction, that the results arrived at are trustworthy and useful, and very creditable to Mr. Vanstavern's energy, practical skill, and perseverance.

District Engineer's Office
Godavery, Dowlaiswaram
10th June 1874

No. 877

From

Major J. Beatty R.E.
District Engineer Godavery.

To

Colonel G. W. Walker R.E.
Chief Engineer & Secretary
to Government P. W. D.
Madras.

Sir,

I have the honor to submit herewith Mr. Vanstavern's report on the coal boring operations of the season at Beddadanole.

2 Mr. Vanstavern was placed temporarily under the orders of the District Engineer for this duty in P. W. G.O. No. 615 of 9th March 1874. But he had received, at the end of January, his instructions to proceed direct to the place where borings were to be undertaken, which he accordingly did. At Beddadanole he was

※ By telegram from Nagpore

joined by Mr Ting by the Geological Survey Department. Work was commenced on the 17th February, and continued up to the 6th June. Mr Vanstavern then packed up all tools and stores of any value and brought them down to Dowlaishweram which he reached on the 15th instant; and I telegraphed to you the most important result of the season's work

3 The place Beddadanolo lies to the west of the river Godavery; at a distance of about 38 miles from it by the shortest baudy track. It is in the Yernagudem Taluq, and the new Local Fund road from Thallapudi to Ashwarowpett will pass within three miles of it. Thallapudi is a village on the right bank of the river, about 15 miles above Dowlaishweram.

4 The total number of holes bored was four:-

(a) Hole No 1, which was carried down to a depth of 16 feet, proved a failure owing to the want of sand augers.

(b) In hole No 2, shale and Coal were met with at a depth of 116 feet. After boring through eleven feet of shale and Coal, the hole was continued up to 229'-11" where it was stopped by the light clay caving in.

(c) Hole No 3 was carried down to a depth of 274 feet, without finding shale or coal, and abandoned for the same reason that stopped No 2

(d) In hole No 4 black clay and shale were met with at a depth of 183½ feet, and after passing through 14 feet, 10 inches of this, a seam of Coal was found four feet, and six inches in thickness. The boring was continued up to 200 feet, and work was then stopped for the season, owing to heavy rains, and the difficulty of obtaining labor.

5 Mr Vanstavern remarks on the unsuitable character of the tools supplied him for boring in clay and makes some suggestions for more satisfactory

working next season, should Government decide to send another party up there.

6 A sketch map of the country about Beddadanole accompanies Mr. Vanstavern's report and this shows the relative positions of the different borings.

A small box containing specimens of the shale, Coal, clays &c. will also be sent.

⊙ Packed and labelled by Mr. Vanstavern

✠ will be despatched by banghy today

7 Mr. Vanstavern reports that the total expenditure on the work up to date has been about Rs 3,500, and further payments have yet to be made, amounting to about Rs 1500 making a total of Rs 5,000. He has handed over the tools and stores he brought down from Beddadanole, and his cash-balance, to the Executive Engineer in charge of Workshops, and under the instructions conveyed in your telegram of 7th Ultimo I have directed him to return to Dumagudiem.

× Including his own pay and travelling batta

I have the honor to be
Sir
Your Most Obedt. Servt.
P Beatty. Major RE
District Engineer Godavery

Dow-laisheram 4

No 65

16th June 1874.

From,

J. Vanstavern Esquire

Exeecutive Engineer P.W.D.

To,

Major I. Beatty R.E.

District Engineer G.D.

Sir,

I have the honor to submit the following report on the boring operations at Bedadanole during this last season. The work was commenced in the latter part of February last. On arrival at Bedadanole a place was selected and boring commenced.

Borehole No 1. Level 94' Section

Sub soil 16'

after going down to this depth came to sand and water. Tried to force down the piping and to get the sand up with the valve bucket; but, this utterly failing, was, for the want of sand tools, obliged to abandon this hole, and

P.W. Diary 1874 Delhi
Entered 25th June No: 38802

The Chief Engineer
and Secretary to Govt
P.W.D. Madras

Dated 10th June 1874

Received 23rd do 1874

Enclosures

Ch. P. Lubeck
Ch. Ry. Diary 253. 2/-2-/74.
Submits Progress Papers and Report on Coal boring operations, stating what the expenditure has been and that Rs 1000 has been allotted to defray Boring expenses.

B. W. Diary Entered 30th June 74

Ch. to Asst 23rd June/74

and to commence another -

2d

Section of No 2 borehole
Level 100. B.M

Sand stone	89.00
Dark clay	17.00
Shale with Coal	11.00
Dark clay	1.00
Light clay	27. 11.
Black clay	7. 00
Sand stone	4. 00
Dark clay	4. 3.
Black clay	5. 6.
Sand stone	6. 6.
Light clay (soft)	33. 9.
Dark clay	6. 0.
Brown clay	8. 0
Total	229. 11

water struck in this hole at 5' depth close to the main Stream -

This hole was commenced in the out crop of the bed of Sandstone in the hopes of it being a solid bed of Sand-stone overlaying Coal; but after getting down the full depth bored the hole began to give considerable trouble by caving in at the soft clay half a day was generally spent clearing out the hole before any further boring could be gone on with, and at last it became so bad that the hole could not be cleared out, it had to be abandoned, and another hole commenced -

3d

No 3 borehole.

Level 105'

Water struck at 44' deep -

Sub soil	1.0
Gravel	2.5
Sandstone	93.7
White clay	10.0
Sandstone	39.0
Conglomerate	2.0
Sand stone	12.0
Light clay	10.0
Sand stone	51.6
Dark clay	5.6
Light clay	3.0

Dark clay	2.0
Sand stone	15.0
Clay	3.0
Sand stone	8.6
Sand stone with Pyrites	10.0
~~Argillaceous~~ Argilleous Sand Stone	10.0
Total	274.0

The 10' of iron Pyrites cost several days labour to cut through.

During the working in this hole, some delay occurred owing to the breaking of the winch frames which had to be repaired before any more work could be done.

This hole when deep also commenced to give trouble by caving in. One day it did so when the valve bucket was down and after four hours labour was got up, with it and the rods twisted. Another attempt was made to clean out the hole but after a whole days work was unsuccessful and obliged to abandon it.

In this hole no shale or coal was struck although I expected that the shale of No 2 would have shewn itself, for this reason shale in No 2 must be of very little extent to the eastward; is either a pocket, or the Sand stone beds dip more than they shew at the surface. To the Westward of No 2 no borings have been sunk and no certain idea can be formed, at surface of the extent of the bed of shale but it may be naturally supposed to run in that direction according to the dip of the Sand stone and the shale in No 2 may represent the Outcrop.

No 4. borehole

Level 107

water struck at 63 feet depth

Surface Soil	1.6
Light clay	18.6
Conglomerate	0.6
Sand Stone	47.0
Dark clay	3.0
Light clay	2.0

Red clay	19.0
Sand stone	2.0
Dark clay	13.7
Sand stone	3.5
Dark clay	12.0
Sand Stone	6.0
Dark clay	21.0
Sand stone	1.6
Dark clay	7.0
Shale and Coal	0.8
Dark clay	1.0
Black clay	7.0
Dark clay	2.6
Clay with Mineral charcoal	5.6
Iron Pyrites	3.0
Hard Sand stone	4.4
Black clay and Shale	4.10
Coal	1.6
Dark clay	0.6
Hard stone	0.8

This gave also continual trouble by caving in and took daily some hours to clean out before work could be commenced.

Coal

Coal has been struck in this hole in appearance it is poor and could be anything but the outcrop to the east. Further borings would be required to find the extent of the bed and probably would improve as is generally the case in these beds.

By the depth it lays at it has apparently no connection with No 2.

The dark and black clays in this hole have all carboneferous matter in them apparently plants or leaves. but being so cut up with the boring tools it is impossible to determine them.

The last 8" in this hole took some four days boring, the rock is very hard and apparently metamorphous but I have no means of testing it; a sample accompanies the clays.

5th. The boring tools with which the work had to be done consisted of rods upto 300' the set and piping in sets of 50 feet long they are essentially rock boring tools and but ill suited to the ground

ground met with here -

Should it be the intention of the Government to go on with the borings it would be necessary to get suitable tools or else much time and money will be lost and consequent disappointment similar to what I have had when I found myself utterly helpless to go on and had to stop the borings.

Some of the tools are pretty well worn out and broke other such as rods Augers cutters valve buckets will do again when repaired but winches piping and some more rods will be required -

Should the Government concur in this, I can make out a specification of what is required for prosecuting borings satisfactorily in ground as met with at Bidadanole -

6th Trained men came with me for working the rods and other tools - For working the winches I got labour from the surrounding Villages this was very unsatisfactory

unsatisfactory as they were continually changing and never stopped long enough to learn the work. In any future operations it would be advisable to engage men for the season they might cost a little more but this would be economy in the long run as they would do more work when they got in the way of it -

7th Where the Camp was pitched is the only place where there is a little water for some miles round and should the work be continued next season some provision would have to be made for the supply a couple of Nortons pumps would do -

Future borings will be to the South and west and I should recommend the Camp being pitched somewhere near Guniperarum. The first holes then at the commencement of the season would be some distance off and as it advanced would come nearer the Camp -

8th The Tools that have been in use require

require repairs. On this subject I have already addressed you in my letter No 54 dated 15th May last.

9th I forward with this report a Map of the site of the boreholes No 2. 100' level is the B.M. Samples of Shale Coal. Clay etc are also sent.

10th The past season's work although satisfactory as far as proving the existence of Coal has been apparently a poor one but it must be taken into consideration firstly the unsuitableness of the tools which caused delay, and Secondly, that work was not commenced till three and a half months of the best time for work had passed. During the latter part of May we had a good deal of rain which has on several occasions stopped the work, the Village men being absent occupied with their cultivation.

11th The estimate sent in for Stores such as charcoal etc is more than ne= =cessally suspended, this is owing to the

the nature of the ground worked in, the cutting tools requiring little facing and repairs, working in clay.

I have the honor to be
Sir
Your Most Obedt Servt
Frans Tavernier
Ext. Engr P.W.D.

1953 Cuddapah 16

Public Works Department

Proceedings of the Madras Government

Read the following

From

The Dr Engineer Godavery (No 877 – dated 8th June 1874)

These papers report the result of Mr Vanotaveno's coal boring operations at Beddadanole from the 17th February to the 6th June 1874; of which Dr Kings report has already been recorded with G.O. No 1777 of 2nd July 1874.

The seam of coal 4½ feet thick struck at-

No 3892/74

Read 2nd, 4th July 74.

Enclosures as

Letter No 877 dated 8th June 1874 from the Engineer Godavery

Directed Engineer to = Answer to the Chief. = Engineer and Secretary to Government P.W.D. Madras.

eal a depth of 188-4 in
Hole No 4, is stated to
be shaly in appearance,
which is apparently
attributed to its being
the outcrop of the coal
bed known to exist
further West. No more
precise report of its
quality will doubtless
be furnished by Mr.
Reng, after assay-
A bed of shale with
coal, 11 feet thick,
appears to have been
pierced in Hole No 2,
at a depth of 186 feet,
but no further indi-
-cations of coal resulted
from further borings
to

Received note by Mr Penn
Feb

to a total depth of 230
feet - It is supposed
from their relative
depth that there is
no connection between
the coal of No 4 Hole
and the indications of
coal in No 2. But the
very slight indica
-tion of shale and
coal found about
30 feet above the coal
deposit in No 4, may
be analogous to that
of No 2; with which
it agrees in the strata
immediately ~~preceding~~ over
and ~~succeeding~~ underlying. How-
-ever that may be,
all

all the holes already worked are on the East side of the Bed-dadanarole drainage &c. &c being the most southerly; and the conclusion arrived at, before next season, to the East and to the South, seems a correct one.

The details of supply of boring tools, their nature, quality, and quantity; of trained and ordinary labour; of water supply and the means of improving it; of next season's encamping ground

29/12

ground, and date of of its commencement, are all matters which the Govt. must leave to be arranged between Dr Vanstavern and the District Engineer, who have only to let their wants be known in the shape of estimates and indents to be supplied.

His Excellency the Governor in Council is quite satisfied that the results arrived at are ~~remarkable~~ and useful; and very creditable

creditable to Inv. Van-
Staverns energy,
practical skill, and
perseverence.

Genl

Lo The D. C. Godavery
—— Conduit Co for Railroad
—— Public Works

Spec Copies sent 27-7-74

W. Ripley Esqre Dr Robert
Gen Survey of Indian Ter
& Messrs Corbett &c
Ref Engrs Copies sent
21/8/75

443-444.

Encl 27/6/74. Rec'd 10/8/74

Govt. of India.

PUBLIC WORKS.

To

The Asst. Engr.
& Engineer

Dated

Rec'd.

Encl. 2

G. O. [illegible] No. 195-S

Nos. 143-144.

Passing orders on
reporting the re-
of Mr. Vans Taverns
boring operations
dadanole
with satisfaction
results arrived
trustworthy
and very creditable
Taverns energy
skill, &